

# THE MODERN SCHOOLMAN

*A Quarterly Journal of Philosophy*

JANUARY 1939

---

## Causality and Quantum Physics

*Henry F. Birkenhauer*

## Dante's Philosophy of Love


*Gerald G. Walsh*

## Realism in Science

*James A. McWilliams*

## Human Desire and the Vision of God

*Edmund Brisbois*



*True Humanism  
A Philosophy of Work  
Pure Jurisprudence  
and Other New Books  
Reviewed*

# THE MODERN SCHOOLMAN

*Published Quarterly from November to May at Saint Louis University*

THOMAS C. DONOHUE, *Editor*  
THOMAS K. MCKENNEY, *Business Editor*

## Associate Editors

EDWARD T. FOOTE	WILLIAM E. DOOLEY
HENRY F. FOX	ROBERT G. NORTH
JAMES W. NAUGHTON	LUCIUS F. CERVANTES
WILLIAM A. VAN ROO	JOHN J. WALSH
RUSSELL R. MAZZA	GERALD F. VAN ACKEREN
WILLIAM A. GERHARD	JOSEPH T. SHINNERS
FRANCIS J. MORIARTY	WALTER J. ONG



## Correspondents

H. J. JOLLEY Mount St. Michaels, Spokane, Washington	THOMAS E. DAVITT St. Mary's College, St. Marys, Kansas
HARRY F. GILMORE West Baden College, West Baden, Indiana	JOHN G. FURNISS Woodstock College, Woodstock, Md.
DANIEL FOGARTY Jesuit Seminary, Toronto, Ont.	JAMES C. BABB Spring Hill College, Spring Hill, Ala.
	ARTHUR A. MACGILLIVRAY Weston College, Weston, Massachusetts

Entered as second-class matter December 1, 1928, at the post office at St. Louis, Mo., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of Oct. 3, 1917, authorized on Jan. 15, 1929.

## CONTENTS

REALISM IN SCIENCE	- - - - -	James A. McWilliams	27
HUMAN DESIRE AND THE VISION OF GOD IN ST. THOMAS	- - - - -	Edmund Brisbois	29
DANTE'S PHILOSOPHY OF LOVE	- - - - -	Gerald G. Walsh	33
CAUSALITY AND QUANTUM PHYSICS	- - - - -	Henry F. Birkenhauer	35
BOOK REVIEWS:			
Pure Jurisprudence	- - - - -	F. P. LeBuffe and J. V. Hayes	42
A Philosophy of Work	- - - - -	E. Borne and F. Henry	42
True Humanism	- - - - -	Jacques Maritain	42
St. Thomas and the Gentiles	- - - - -	Mortimer J. Adler	43
A Companion to the Summa	- - - - -	Walter Farrell	43
Philosophy of Law of James Wilson	- - - - -	W. F. Obering	43
Character Formation	- - - - -	Bakewell Morrison	44
Kierkegaard	- - - - -	Walter Lowrie	44
Catholicism, Communism and Dictatorship	- - - - -	C. J. Eustace	44
Jesuit Code of Liberal Education	- - - - -	Allan P. Farrell	45
Towards the Twentieth Century	- - - - -	H. V. Routh	45
Algazel's Metaphysics	- - - - -	J. T. Muckle (ed.)	45
General Psychology	- - - - -	William Stern	45
Naturalism in American Education	- - - - -	G. O'Connell	46
Reality and Value	- - - - -	A. C. Garnett	46
Substance Theory of Mind	- - - - -	T. J. Ragusa	46



# THE MODERN SCHOOLMAN

*A Quarterly Journal of Philosophy*

Vol. XVI

JANUARY 1939

No. 2

## Realism in Science

JAMES A. McWILLIAMS

*Professor of Philosophy and Director of the Department  
St. Louis University*

**H**ISTORICALLY there have been, and it seems there must be, but three ultimate positions with regard to the problem of knowledge. The various schools fall into three categories. The subjectivist, or "idealist," maintains that knowledge is no more than a state or condition of the knowing subject; the pan-objectivist, as the American New Realist, that it is simply a condition of the object; the traditional realist that it is a correspondence of the subject to the object. All admit that there is a difference between "known" and "unknown." Thus the subjectivist grants that *new* ideas come to him, and that previous to their coming they were unknown; the pan-objectivist concedes objects unconditioned by awareness; the realist maintains that the subject, the object, and the correspondence all pass from the state of unknown to known.

In the simplest terms, therefore, there is general agreement that there is such a fact as the passing from un-awareness to awareness. The three schools differ as to *what* things can so pass. One says, only the subject (newly conditioned); another, only the object; the realist says, both, plus the correspondence. But since the realist has three items to account for, not merely one, he has the additional problem of determining the time order in which each item puts in its appearance. For it is not essential to the realist position that all three items present themselves in awareness simultaneously.

The basic objection to the purely subjectivist position is this: the subjectivist contends that the only conceivable meaning for existence is existence in awareness; yet the very *coming into* awareness involves a conceivable meaning for not-in-awareness. Hence he necessarily postulates a conceivable status other than that of "in awareness." Nor is there any escape from this inconsistency by claiming that the awarenesses are only "appearances," because even appearances come and go, and so imply another status than that of mere awareness.

Surprising as it may seem, there are men of high rank in science today who attempt to justify the subjectivist, or solipsist, position. P. W. Bridgman writes: "Part of the hostility to the solipsist position is, I think, merely due to confusion of thinking . . . It seems to me that . . . the solipsist position . . . is a simple statement of what direct observation gives me, and we have got to adjust our thinking so that it will not seem repugnant."<sup>1</sup> This novel stand, novel for a scientist, is not confined to Bridgman. A recently published statement of a famous physicist

sets forth some widely-accepted scientific "conclusions." The first of these is, "No true, objective certitude about an external world is at all attainable."<sup>2</sup>

This extreme subjectivism would seem to be the end-result of the scientific philosophy of Ernst Mach who maintained that science consists in constructing models of what we choose to think nature or reality is like.<sup>3</sup> We do construct models, it is true, but that does not mean that we know nothing except the model, because we first knew some things which suggested the model. The model is intended merely to help us remember what we have discovered, and to forecast the lines of future discoveries. It is an instrument for organization and research, and the model can be re-modeled as we go along. That does not mean, however, that we are re-modeling external reality. Today the mechanical model is being replaced by the mathematical model. Mathematicians invent new symbols for new entities of whose existence they have merely an inkling. "That is," says Bridgman, "we have here invented or created a concept, and after the invention of it, it acts as if it had existence."<sup>4</sup> Couple this admission with the following and you have pure subjectivism: "direct experience embraces only the things in my consciousness—sense impressions and various sorts of cerebrations—and naught else."<sup>5</sup> Some of these, he says, "I describe as external to myself, and others I recognize as internal, and possibly there are features where the decision is difficult." Since Bridgman gives no rule by which we describe things as external, or decide the difficult cases, or what external facts, if any, correspond to our cerebrations, we have no way of making science anything but a study of our own subjective experiences. According to Sir William Dampier,<sup>6</sup> Russell and Whitehead in their *Principia Mathematica* contend that although our models are purely subjective constructs, still "we can infer that something exists independently of our thoughts about it, and that in some unknown way the relations between its parts correspond with those of our model." Here again the "unknown way" reduces this agnostic realism to pure subjectivism.

The American New Realists made a bold break for freedom from this subjectivist prison by asserting that consciousness is never "in the skull," but always "out there."<sup>7</sup> Holt and others use the example of a search-light playing on distant objects; consciousness is not the lamp itself but the distant illuminated patch of the world. This was surely a rash attempt to make science *objective*. But if awareness is confined entirely within the object,



so that no one else has an awareness of it, then consciousness has only changed prisons and is still subjected to solitary confinement within a self.

Pure subjectivism and pure objectivism limit the whole of experience to a mere condition of the self, very much as being well or ill is limited to the self; but neither satisfies the requisites of knowledge. For knowledge we must accept both subject and object, and then try to see how we can know that they correspond. That alone is genuine realism. The correspondence theory of knowledge has often been pooh-poohed because, it is said, we sometimes discover that the object does not correspond to the thought. How we could ever discover the non-correspondence without invoking another correspondence we are not told. But here is an example. Our eyes present the plane surface of Daytona Beach. On closer investigation we discover that it is not a plane at all, but granular. We take a grain of the sand to the laboratory and discover that it again is made up of smaller crystals; the crystals, of atoms; the atoms, of subatomic particles. So where is the correspondence to the plane surface reported by the eyes? We answer that in the case of material things correspondence has degrees. If the correspondence is exact to a given degree, then it is, to that degree, true correspondence. If I state the law of gravitation for the solar system and then discover that it must be modified for molecular distances, I can still hold correspondence on the large scale. If I say that steam exerts an equal pressure on each square inch of a boiler, I do not mean that areas the size of a molecule have a constant and equal pressure. If I say that light spreads out from its source with an even front, I can have correspondence with fact on any ordinarily measurable scale; that degree of correspondence is not destroyed by the photo-electric effect, which seems to indicate that light has the character of minute particles.

If a statement about the structure or laws of natural objects corresponds to the objects on a given scale, but does not correspond on a finer scale, that fact does not entitle us to assert that there is no correspondence whatever. If I say that a piece of cloth has a basket-weave, I do not mean that the individual fibers also have that weave. Because footprints in the sand have a certain recognizable direction, that does not mean that the individual grains of sand in the footprints have a direction. Yet there are philosophizing scientists who, because there is not the same type of laws and order on a small scale as on a large scale, assert that there is no correspondence between concept and object, and even that there is no object at all. They conclude that all our concepts are no more than mere mental constructs, that each new concept is constructed out of or suggested by nothing more than the old concepts. Thus science is simply a subjective development of the self, without any object about which to do our thinking.

But surely our concepts must begin somewhere. They begin, in fact, with primitive experiences, such as seeing. Seeing, let us say, is an experience of a hand and a table;

in that primitive awareness the two are on a par. If I later discover the hand to be "me" and the table "not-me," I can not rule out the "not-me" as non-existent, for from the very start it was presented on a par with the "me." I might, of course, rule out both the hand and the table, and become only a soul, as Berkeley wished, but even as a mere soul I still have the experience of the "me" as distinct from the "not-me." Hence to say that all experience presents only the subject is to falsify the very primitive data from which our concepts are derived and upon which they always ultimately rest.

The subjectivist, after discovering that it is the subject which does the seeing, feeling and thinking, arbitrarily rules that it can never see, feel, or think anything but itself—in open defiance of the fact that the whole process began (and is continued) with the non-self on an equal footing with the self. As a content of awareness, both subject and object have the same status from the beginning, and it is as impossible rationally to reject the one as to reject the other. Pure subjectivism is thus no less an outrage against the facts of awareness than is pan-objectivism. These aberrations cannot be charged to the primal source of knowledge, they are due to the contamination of that source by the interpolation of later and arbitrary opinion within the original evidence.

Nor may we rule out facts that cannot be measured on a graduated scale. Among such facts which come within the purview of science are those of abstraction and inference. When I abstract from the shape of a thing and consider only its color, that process is as much an awareness as seeing the color and the shape to begin with. If my hand and my neighbor's are so much alike that I cannot tell which is mine until I pinch or move it, then infer that it is mine, the inference is as much an awareness as is seeing. And when I abstract certain elements from an experience and compare them with elements in another experience, I am immediately aware of the abstraction, the comparison and the similarity or difference. That not all these operations are not spread out in space and capable of being registered in pointer-readings is no argument against their being facts.

The scientist finds pointer-readings serviceable in classifying certain kinds of facts and in projecting new experiments, but that gives him no warrant for saying that we know only pointer-readings. The mathematician translates the pointer-readings into mathematical symbols, and by manipulating the symbols, performs an experiment on the world *in absentia*. But that gives him no right to assert that we know nothing except the symbols. Nature acts with necessity, not freely; hence mathematical deductions should parallel nature's performance. Yet we must not forget that the symbols are tags for abstractions and generalizations, and so we cannot expect to discover in the external world the concrete and exact counterpart of these mathematical entities. Nor may we safely push the mathematical application beyond the scale on which the original measurements were taken, as the quanta have abundantly demonstrated. If the measurements give only averages



we cannot expect mathematics to detail for us the performances of individual particles. The probability symbol  $\Psi$  cannot decide whether light is waves or particles, or both or neither, but it does account for light phenomena within given limits. Surely it does not mean that light is nothing but  $\Psi$ .

Another mistake of the subjectivists is to suppose that in order to discover correspondence I must compare my *mind* with the object to see if the two correspond. I do not compare my mind with anything. I compare one objective concept or image with another objective concept or image. In most cases there will be only partial correspondence, but by abstraction I can separate out the parts which do correspond. Often, too, the parts separated out could not exist by themselves in that isolated fashion, but that does not prevent their being thought of in that fashion. Different people with different interests will make different abstractions, and yet all of these may be verified in the same existential object. If, to use an old example, the birch rod is differently regarded by the schoolboy, the botanist, the chemist, the physicist, and the social scientist, these several abstractive views do not invalidate the objectivity of the rod itself. The rod can at one and the same time be a threat in the hand of the task-master, a

specimen of the genus *betula*, a concatenation of molecules, an elastic system, and an outmoded instrument of boy culture. In a similar way mathematical constructs, or even alternative methods of treatment, as the mechanical, relativist and quantum mathematics, may all be entirely compatible with the objective world of pure metaphysics and of everyday common sense. The mind, with full awareness of what it is doing, can prescind, abstract, compare, analyze and make inferences from its data without disturbing or mutilating the data themselves. They still stand as they are. It is only the neglect of attention to what the mind is doing with the original delivery of immediate experience that undermines the wholesome realism which both science and philosophy should engender.

## REFERENCES

1. P. W. Bridgman, *The Nature of Physical Theory* (Princeton Univ. Press, Princeton, 1936), pp. 15, 16.
2. *Bulletin of the American Association of Jesuit Scientists* (Eastern Division), December, 1938, p. 48.
3. E. Mach, *Die Mechanik in ihrer Entwicklung historisch-kritisch dargestellt* (1st ed. 1883; Eng. tr. Chicago, 1893).
4. *Op. cit.*, p. 50.
5. *Ibid.*, p. 13.
6. Sir. W. Dampier, *History of Science* (Macmillan, New York, 1936), p. 466.
7. E. B. Holt, *The Concept of Consciousness* (1914), p. 358.

# Human Desire and the Vision of God in St. Thomas

EDMUND BRISBOIS  
Professor of Ethics

Collège Philosophique et Théologique, Eegenhoven-Louvain

Translated from the French by

John J. Quirk, St. Louis University High School

*Editor's Note:* In a previous article the author proposed his problem thus: "Is there in man's nature considered absolutely, that is, according to its essential makeup, a natural desire for" his "supernatural perfection. . . ?" After a rigorous examination of the Thomistic texts he concluded that: "According to the Angelic Doctor this desire, considered in its essence, is not an act of the will, but a natural inclination which he clearly differentiates from every actual exercise of the will." The present essay elaborates the author's interpretation of this view.

IN THIS second article we should like to set forth the metaphysical explanation of what we have concluded was the real opinion of St. Thomas as to the natural desire man has to see God. With this in mind, it is our intention to show how this desire comes under the general principles of Thomistic psychology as applied to the human will.

## *Phenomenology of Man's Voluntary Activity According to St. Thomas*

The deliberate exercise of the will, as revealed by psychological experience, is essentially the adherence of the will to a particular object, to a concrete good, to a determined form of human perfection.

Our voluntary activity is not, however, made up of a series of independent unconnected acts, each one of which would be complete and self-perfecting. On the contrary, our activity presents itself as a continuous movement towards a term of which it is the progressive actualization. The explanation is that, according to St. Thomas, every particular action of the will necessarily implies the desire for a last end, that is, for a good desired for itself and by reason of which all other objects are desired. Man acts

necessarily for a last end to which he refers every exercise of his activity. In every one of his actions he has always before his mind's eye some ultimate good, some form of total perfection freely chosen by him and expressing his ideal, the use he wishes to make of his life, the manner in which he wishes to develop himself and his capabilities, all of which holds for him the place of a supreme good. His activity thus takes on the appearance of a continuous movement, a *fieri* which tends towards the realization of this last term. The goal of this movement may shift and change, but the movement itself always remains a successive becoming. For St. Thomas there is always at the beginning of the activity of a rational being a first tending towards, a choice which falls upon a determined form of perfection and of the being's total realization of itself. This is the reason why man's entire destiny is really bound up with each of his acts. Man's ability to act in a manner worthy of his nature is also his ability to set up a final goal for himself and to direct his activity thereunto.

But if man does of necessity so propose to himself an ultimate end of his activity, the reason can only be that he has in his makeup a natural disposition which is formed beforehand in his will, and which conditions every exercise of his will. St. Thomas called this natural disposition the primal act of the volitive faculty.

This primal act is a real predetermination of the activity of the will, and is the necessary form of its exercise. It is



a form naturally written into the will which assigns to the will its object; not indeed the concrete determinations of this object, but its formal conditions. There is therefore in every exercise of free will an object necessarily desired according to which all other objects and all other particular goods are necessarily desired: this is the *beatitudo in communi*, or the good, the complete perfection of human nature considered in its abstract conditions. When man freely exercises his will by tending towards an object or some particular good, he only determines concretely with regard to this same particular object that which, in the first act of his will, he wishes necessarily but in an undetermined fashion; he only gives body and matter to the natural form of his act. This is why every subsequent individual concrete act of the will supposes, at least implicitly, a concrete and freely chosen conception of the *beatitudo in communi*, of that complete perfection of man's nature necessarily desired by man in every exercise of his will. It is to this concrete form of ultimate perfection that the particular object desired is referred.

The primal act of the will constitutes then a part, a principle of the voluntary act taken in its entirety. Though in itself incomplete, this act is nevertheless in itself a determination of the will, and as such implies a principle of determination which can only be some knowledge of the object desired. And so it is that the primal act of willing requires a certain knowledge of the last end and of beatitude naturally desired. True enough, this knowledge is of an abstract nature; that is to say, it is but knowledge of the essential conditions of the beatitude naturally desired. Then again, this is also a natural knowledge; for whatever is naturally desired must also be naturally known. As a consequence, we have a knowledge that is not acquired but is in a certain sense innate: innate, not indeed in the form of actual knowledge, but in the form of a habit, *habitus*, or of a natural disposition which of itself passes into act in every exercise of the volitive faculty. Man has therefore a natural knowledge, in an abstract form, of the essential conditions of his perfection and of his last end, the acquisition of which he wills necessarily, at least in an implicit manner, in every exercise of volition. Man's perfection and last end are the object of the primal act of his will.

Still, the primal act of volition is not yet the absolutely first principle of volitional activity. In fact, every act constitutes the exercise of an operative potency; the volitional act thus becomes the exercise of the will considered as an active potency, of the *voluntas ut potentia* (will as potency), of the *virtus volendi* (power of willing), as St. Thomas calls it. What is the nature of the will considered precisely as a potency? We can deduce the answer to this question from the nature of the act of the will. This act is, as we have already seen, an inclination, a tendency, a movement of the will towards an object or towards a particular good; in fine, a determined definite movement, one directed by knowledge of the good desired. Considered precisely as a potency, the will can thus be only a movement that must be directed, an inclination that is to be determined: for this movement, this inclination which

makes up the act of volition, cannot be produced solely by the knowledge of the object thus desired. How, indeed, could a cognition, in itself only the representation of an object, produce an inclination or be the *efficient* cause of such a movement? Inasmuch as it is a principle of the act of the will, the cognition of an object desired can only be the *formal* cause of the determined movement which constitutes that act. This cognition or knowledge presupposes then a movement to be determined, and this movement is nothing but the will considered as a potency—the *virtus volendi* (power of willing). Of itself this *virtus volendi* constitutes a movement or tendency which is prior to the proper exercise of the will, a movement towards anything that can be desired by the will either freely or naturally; a movement, therefore, towards the entire good, towards the whole perfection which can be desired in any manner whatever by man; a movement towards the good, towards perfection, towards human happiness in its most general acceptance; a movement which the primal act of the will and all subsequent volitions only determine. This inward motion is evidently innate; it is therefore not subsequent to cognition, and can be actively exercised in the form of an act of the will only to the extent to which the subject *will-ing* can know its object by natural or acquired knowledge.

Such are the conditions of voluntary activity which a reflexive analysis of the exercise of the will, considered as it appears in experience, permits us to state precisely. Let us now proceed to the metaphysical meaning of these rational conditions of the activity of the will, so far as the principles of "will-psychology" permit us to determine that meaning.

#### *The Metaphysics of Volitional Activity*

Metaphysically and with regard to the general conditions of being, the will is nothing but the expression, in a spiritual being, of the necessary adherence of every being to its form, and to the perfection, which is the plenitude of the form of that being. This necessary adherence of every being to its form and to everything related to its form takes its origin from the first condition of being, which demands that every being become itself by realizing its form. And form is precisely that which makes the being what it is and expresses its capacity for existence. Thus we find in every being a necessary direction towards a perfection which is its good. This ordination is expressed in the nature of the being by a necessary inclination towards this perfection, towards this good. This natural inclination, the moving and directing principle of the being's whole activity, has its roots in the very nature of being, and like nature itself is produced by God, Who in bringing the being into existence moves it towards its term in accordance with its own conditions.

This divine movement, though found in every created thing, does not in reality operate in the same manner in all beings. In the inferior beings, incapable of cognition, it takes the appearance of an innate appetite in the proper meaning of the term: a *pondus naturae* which is inseparable from the nature of the being and moves it to its act in a completely determined manner.



In the higher creatures, however, this inclination towards a being's own good, instead of being diffused (so to speak) throughout its entire nature, of becoming one with that nature, is centered in an adapted operative potency emanating of course from nature itself but distinct nevertheless from it: a potency, the function of which is to express *by its activity* the tendency of a being towards its good and perfection. Such in the spiritual being is the will, considered as a potency, the *virtus volendi*: it is the faculty or organ through the agency of which the tendency of this being towards its perfection and its good must find expression. Of itself—considered that is as mere potency, and prior to its operation—the will is a movement towards the entire good of the being taken in the widest possible sense; namely, in so far as this good includes all that the being can possibly wish for, every form of good and perfection, every possible object of the will. Furthermore, by its actuation but not of itself, the will as potency will express the actual and concrete finality of the being: that is to say, its necessary tendency towards the perfection corresponding to the particular conditions of the nature of the being.<sup>1</sup>

Taken thus as a potency, precisely as such and independently of its operation, the will is a movement towards the complete good of the being; an innate movement subsequent to no cognition of its object. The will resembles in this respect the innate appetite of inferior beings; for, as St. Thomas says, "What belongs to nature as such obtains even in intellectual beings."<sup>2</sup> But on the other hand the will differs essentially from the appetite of lower creatures as regards the manner of its exercise. Lower beings are moved by their innate appetite towards their particular good and to their act. This appetite necessarily determines their activities with regard both to the specification and to the exercise of this activity; not simply, that is, according to the modalities and the object of this exercise, but even by the necessary setting-in-motion of this same exercise whenever the required conditions are fulfilled.

Such however is not the case with the spiritual being ordained by nature to move itself, to judge for itself concerning its own particular good, to determine itself regarding this good and regarding that which it desires to be. In Scholastic terminology, a spiritual being is ordained to be the cause of its own act with respect to the exercise, the form, and the end of the act. Thus it is that the activity of the spiritual being and the exercise of its volitive faculty is that of a being, moved indeed by another, but one which must at the same time move itself to its act: *agit movens motum* (an agent acting though itself acted upon), as the Schoolmen say. In such a being, therefore, the received motion cannot be the totally determining movement. Of course, this movement which constitutes the will as a potency implies a transcendental relation to a term that is the adequate object of the act of volition; but this motion becomes effective only to the extent to which the spiritual being moves itself towards its goal. In order that the being may tend towards this term to which it has been left undetermined, it must know the term. Hence the movement

towards good that constitutes the will can be exercised to that extent only to which the subject willing is capable of knowing the object to which it is thus moved. It is for this reason that volitional activity—the will in act (*voluntas actualis*)—is not concretely determined as to its exercise, nor to its specification or end, prior to the cognition of the good desired; although we must admit at the same time that the will, considered as a potency, is necessarily ordained to its term. But this ordering of the will to its term is essentially a metaphysical one and is of itself unconscious since it is not consequent upon the knowledge of its object. It exerts influence on the exercise of the will only in so far as the subject willing can rise to a consciousness of its object. From the psychological standpoint, then, the will as potency is undetermined and implies no relation to any particular good; and it is precisely the exercise of the will that constitutes this determination, of which the good known is the formal principle.

In man this determination or actuation of the will takes place in two stages which constitute the primal and the secondary act of man's faculty, and which express as such the necessary inclinations of human nature to its complete perfection in accordance with the conditions proper to that nature.

These two acts of the will (the second is only the first brought to total achievement) correspond to the double aspect under which we may consider human nature according to its perfection and to the two stages of the realization of this perfection. As a matter of fact, human perfection connotes two successive stages in its realization. If man could possess naturally—as pure spirits actually do possess—the totality of the determinations of his essence and the complete perfection of his nature, he would cleave to this perfection immediately from the very first exercise of volition; and he would do so by a natural act of the will, an act subsequent upon the natural knowledge he possessed of himself. He would in this way possess in its entirety the object which answers to his natural desire for perfection and happiness. In the exercise of such a volition, there would be no occasion to distinguish a primal and a secondary act; for both would be found identified in one and the same natural act. But such is not the case with human nature. Human nature does not possess of itself the sum total of the determinations by which man is constituted perfect according to his form, but only the sum of his essential determinations in virtue of which he is *homo simpliciter* (man as man).<sup>3</sup> Thus, in possessing his nature, man possesses his complete and ultimate perfection only inchoatively. Human nature considered in its essential conditions is only the rough sketch, the first step in the process of realization—in a word, the first act of man's complete perfection bearing within itself, together with the demand for its realization, the prefiguration of this same realization according to its abstract and formal essential conditions. This realization of human perfection is the work of man's own activity, by which man gives himself the determination of his own form in the secondary act. By these determinations man freely perfects himself in accord-



ance with what he wishes to make of himself and with the concrete form of total perfection which he deems to be the ultimate good for him. We are here speaking of a successive realization; for every exercise of human activity is such, bound up as it is with matter and the conditions of matter. Each particular action completes this realization according to an indefinitely progressive *fieri*. This is the dual state in which human nature can be considered with reference to its perfection. To these two complementary states of human nature considered in relation to the realization of its perfection, there corresponds the double determination, itself complementary, of man's will with regard to that will's primal and secondary acts.

There corresponds to the natural essential condition of human nature, which is the first act of the realization of its perfection, a primal act of the will by which man *wills* himself to be naturally and necessarily just what he is naturally and necessarily, and wills at the same time the demands for the completion and perfection of his nature exactly as these demands are imprinted in his nature; that is, according to the essential plan of this completion and this perfection.

And to the perfection of human nature in the secondary act, there is a corresponding deliberate exercise of the will by which man determines freely and concretely what he naturally wills in an abstract manner. To this double determination must correspond, as principle of the determination, a double knowledge of man's complete good. His natural act of the will, the primal act of his will's determination, implies a natural cognition of his good, although this cognition is abstract and formal: that is, a cognition of the essential conditions of man's perfection as they are naturally imprinted in the first stage of the realization of their perfection. Man's free will supposes an acquired and concrete knowledge of what he deems his highest good, and of that concrete form of his entire perfection which he wills to effect and towards which he directs the particular good which is the object of his act.

Evidently neither this twofold knowledge nor the primal and secondary acts of the will are separable elements of a voluntary act, any more than the two states in which we considered human nature with reference to the realization of its perfection. But these two states are constituent principles of the exercise of voluntary activity taken in its entirety, and they must of necessity be found in every concrete act of volition.

Thus this determination of the metaphysical conditions for the exercise of man's volitional activity will permit us to account for the different aspects of this exercise which reflexive analysis has enabled us to discover. Metaphysically considered, the movement towards good which establishes the will as a potency, the primal act of the will, and its determination in secondary acts appear as the successive expressions of this essential and fundamental tendency of human nature towards the full actuation of its capability for existence and its capacity for perfection.

The primal act of the will, then, is essentially a primary, natural, and necessary determination of the *virtus volendi*

which expresses according to its abstract and formal conditions the ultimate perfection that must be realized in human nature in order that that nature be fully what it should be. To put it briefly, this first act expresses the finality of human nature. This natural act of the will is the principle of all the volitions in second act, for these latter are nothing but the concrete determination freely chosen by the wishing-subject of what he naturally wills in an abstract manner. Thus in every exercise of volitional activity man seeks only one thing: to effect an equilibrium in the internal movement, in the dynamism of volition through the instrumentality of deliberate acts of the will. The human will approaches each particular object, then, with this first necessary intention of attaining its complete perfection; a perfection which in accordance with its essential conditions it necessarily and constantly wills in its every activity, even in its adherence to the morally evil object which diverts it from that perfection.<sup>4</sup>

To complete this analysis of the metaphysical conditions for the exercise of human volition we must still determine what in the opinion of St. Thomas is that ultimate and complete perfection, the object of the primal act of volition, towards which man tends necessarily in every exercise of his will.

This object can only be the completion of that perfection of which human nature is a mere sketch and the beginning: for it is precisely the demand for this completion that is expressed by the primal act of volition. St. Thomas puts the matter quite clearly:

Nothing can be ordered to an end unless there preexist in it some proportion to that end, that from this proportion there may arise in the thing some desire for its end. It is for this reason that there is found in the thing a certain natural beginning (*inchoatio*) of its end: for nothing desires except inasmuch as it desires some likeness of that end. Thus there is in human nature itself some natural inception of the very good which is proportionate to human nature.<sup>5</sup>

Considered absolutely then and according to his essential conditions, man wills in the primal act of his volitional faculty the natural ultimate end of which his nature is the *inchoatio* and which corresponds to the natural exigencies of his nature for completion. It is this form of final perfection which man knows naturally according to his essential condition and which he wills necessarily in every exercise of his will.

It follows that this end is also one that man can realize by his active natural capacities and by the natural use of the operative potencies of his nature considered absolutely. For to this natural exigency there must correspond natural capacities for realization, as well as natural conditions for the exercise of these same capacities, all of which is necessary in order that man may attain the term he naturally wills.

Thus in a form that expresses the essential points of its perfection, natural volition accounts for the necessary direction of human nature towards its last end; that is, to that degree of complete perfection which it can realize and which it must obtain to achieve the *quietatio appetitus* (repose of desire). This repose constitutes the beatitude that is in keeping with man's natural condition and to-

[Continued on p. 37]



# Dante's Philosophy of Love

GERALD G. WALSH

Graduate School, Fordham University, New York

EVERYONE remembers that Dante once wrote:

I am a man who, when  
Love whispers to the mind, takes note and then  
Retells the message to the rest of men.<sup>1</sup>

It is not so generally realized that with Dante Love was not merely a matter of passionate experience and poetic expression; it was likewise the object of philosophical reflection. You can find, scattered about in his works, the elements of a quite complete theory of love. That theory, of course, is substantially Aristelico-Thomistic; although, poet-wise, Dante will sometimes be caught bringing in *Beauty* when he ought, as an abstract philosopher, to be thinking of the *end* or the *Good*.

## Love and the Noble Heart

As a young poet, before he had mastered Aristotle and St. Thomas, he took over a philosophy of love which was common to the group inspired by Guido Guinizelli and Guido Cavalcanti. This group had worked out a formula for ideal love parallel to the Scholastic formula for abstract thought. Just as the individual thing that is true gives us a phantasm which under the working of the *intellectus agens* awakens the possible intellect to the actuality of a thought; so the *bella donna*, the lovely lady, gives to the *cor gentile*, the noble heart, a picture that awakens the heart to the actuality of ideal love. You get the theory quite briefly in the lovely sonnet:

Amore e 'l cor gentil sono una cosa  
(Love and the noble heart are one sole thing).

Beauty (*bieltate*) in the lovely lady (*saggia donna*) gives pleasure to the eyes (*piace a gli occhi*), and then within the heart is born a longing for the lovely thing; a longing, which, if it lasts, awakens the "spirit of love" (much as, in the presence of a phantasm there is awakened a spiritual "intention" in the mind).

Bieltate appare in saggia donna poi,  
che piace a gli occhi sì, che dentro al core  
nasce un disio de la cosa piacente;  
e tanto dura talora in costui,  
che fa svegliar lo spirito d'amore.<sup>2</sup>

## Love and Liberty

The maturer Dante of the *Divina Commedia* had mastered the *Summa Theologica*. In many ways the poem is but the *Pars secunda* set to music. At any rate, just like every student of St. Thomas, Dante becomes haunted by the problem of reconciling what looks like the inevitability of Love with the ethical need of liberty. This is the problem which is faced in a famous speech put into the mouth of Virgil, in the central cantos of the *Purgatorio*. A loose prose paraphrase will serve to show how the poet could handle a philosophical problem.

Neither Creator nor any creature, son, was ever without Love, whether in the form of tendency to an end or attraction to the good.

Natural instinct can never go astray; but the human will can err by loving a seeming good, or, when loving a real good, by loving too little or too much.

Where the Supreme Good is the object of our love; or where there is measure in the love for lesser goods, no sin can be involved.

But let the will be turned towards evil, or move to what is good with more or less ardor than is meet, then is the creature at odds with his Creator.

And so it is that Love is the root of every moral merit, and likewise of all that is morally amiss.<sup>3</sup>

The human soul, created with an aptitude for love, responds at once to all that pleases it, so soon as by some pleasing thing it is awakened into act.

From every reality which our senses apprehend, an abstract concept (*intenzione*) is formed by abstraction (*tragge*) in the mind, and to this the mind must turn;

And if the mind thus turned leans (*si piega*) towards what it sees, this leaning is love, a new life born within the soul by means of the lovely thing.

Then, just as fire by the tendency of its nature moves upward to where its life lasts longest,

So does the soul in love pass by a spiritual movement to desire, and then it knows no rest until the thing it loves give joy.

And now it may be seen how far the truth is hidden from those who say that every love is laudable,

Merely because the thing we love seems good. A seal is not authentic because the wax is good.<sup>4</sup>

All this has been said by Virgil. It seemed to Dante a fair account of the mere psychology of Love; but it left the ethical problem unsolved. Dante puts the difficulty thus:

If Love comes in upon us from without, and if the soul walks with but a single foot [that is, if it has no power of choice], where is the responsibility if love is right or wrong.

Thereupon Virgil attempts a rational solution of the problem of reconciling Love and Liberty, leaving to Beatrice (the symbol of theology and Divine Revelation) the deeper problem of reconciling Free Will and Divine Providence.

So far as Reason sees in such matters I can speak; in regard to higher problems that require the Faith, you must look to Beatrice.

Every substantial form which is distinguishable from matter but yet in union with it has some specific faculty,

Which, however, is not perceptible except in operation, nor does it reveal itself but only its effects; as, for example, the principle of life in a plant is revealed by the greenness of the leaves.

So it is with man's capacity to understand the prime truths and with his love for things that all men love.

We merely know the fact that such power to know and love is in our nature, like the instinct in the bee for making honey; and for such prime will we can be neither praised nor blamed.

But in order that our love may ever be conformed to this, there is innate in us a power that gives us counsel; and this is meant to hold the threshold of consent.

This is the root of our responsibility; and we merit according as it gathers in and winnows good and evil inclinations.

Those whose philosophy went to the roots of things took notice of this innate liberty; they left some moral meaning in the world.<sup>5</sup>

There you have a fair specimen of Dante the philosopher. I need hardly point out, one by one, the echoes of St. Thomas in a passage like this. It is enough to say that if one will turn to the account of angelic love in questions fifty-nine and sixty of the first part of the *Summa*, or to questions nine to eleven and twenty-six to twenty-eight in the *prima secundae*, he will find that Dante is following very closely on the heels of St. Thomas.

By way of illustrating this remark, we make look at a few of the passages. Take, for example, the opening words:



Nè Creator nè creatura mai  
 . . . fu senza amore,  
 o naturale o d'animo.<sup>6</sup>

What is this but a paraphrase of the famous expression of St. Thomas that "every agent of whatever sort acts out of some kind of love in all the things it does"?<sup>7</sup> It is the same with Dante's lines that speak of the process from love to desire in a spiritual movement that ends in joy.

Così l'animo preso entra in disire  
 ch' è moto spiritale, e mai non posa  
 fin che la cosa amata il fa gioire.<sup>8</sup>

This is practically a translation of a well-known passage in St. Thomas:

The first modification of the appetite by the object is called *love*, which is nothing but the complacency in that faculty. From this complacency follows the *movement* towards the object, which is *desire*, and finally *peace* in possession, which is *joy*.<sup>9</sup>

#### Cosmic Love and Human Freedom

In Dante's philosophy of love there was, besides the purely psychological and ethical aspects, a cosmological point of view. Just as in a materialistic age we tend to take the purely physical notion of "attraction" and to apply it to a spiritual relation between two persons, so in the Middle Ages the tendency was to take the purely spiritual notion of love, which applied primarily to a relation between the Persons in the Blessed Trinity, and subsume under that notion not merely human affection but cosmic order and even terrestrial cohesion.

Dante puts into the mouth of Beatrice a speech which may serve to illustrate the point:

All things whatsoever are parts of one great whole, and Order is the form that makes the universe like God.

In this cosmic Order the higher creatures [like man and angels] can discern the foot-prints of Eternal Power, Who is the End on account of which such Order came to be.

In the Order that I speak of, all things have a place, nearer to or farther from their Source, according to their nature and their destiny.

And so it is that all things move across the one wide sea of Being, but yet to different ports, each nature navigating, as it were, by its own specific tendency or purpose.

Thus fire, by its innate tendency, moves upwards towards the moon; another instinct moves the appetite of irrational animals; a third is the force of cohesion in the earth.

And not alone the creatures that lack intelligence does this bow shoot; but likewise those that have intelligence and love.

The Providence that puts each thing in its proper place makes, with its light, the empyrean motionless, while below this whirls the heaven that has the highest speed. . . .

However, just as in art it is, often enough, true that the form achieved does not reach the ideal that was dreamed, because the material at hand is deaf to the artist's call;

So from the path proposed by Providence those creatures that have the power of choice sometimes depart and swerve, at will, to some other goal,

If they are attracted by some seeming good, just as, in the case of lightning, fire whose tendency is to rise may be seen dashing down to earth.<sup>10</sup>

Here is Dante looking out on cosmic Beauty with the same intellectual gaze that could see the "eternal feminine" in Beatrice. Only now he thinks of beauty in the sense of cosmic order brought into harmony by Divine purpose and sustained by Divine intelligence.<sup>11</sup> And, moreover, he is not just an artist contemplating the *splendor veri* in the world; nor yet a poet feeling the vision turning into passion. He is the philosopher thinking of the world, not as the object of his love, but as the subject of its own

"love"; thinking of the world as "in love" with God as its final good. This sort of "love," of course, is not conscious passion; and yet it is what passion is in its own way, a tendency to what is good. It is the kind of "love" St. Thomas speaks about when he says:

Gravity itself, the principle by which everything is set in motion towards its natural place, because it is *connatural*, can be called in a sense "natural love."<sup>12</sup>

Of course, such "love," in the sense of Order determined by Divine Purpose and Providence, is even harder to reconcile with human freedom than the love that Virgil spoke about. Beatrice, the theologian, does not prove the possibility of free choice in such a cosmos. But she declares that in fact man is free, that he "can swerve, at will, to some other goal . . . some seeming good."<sup>13</sup>

#### Love and Creation

There is a higher kind of love in Dante's philosophy than the "love" in Nature and the love in man. There is Love, supremely, in God. This is Love on the level, not of matter nor yet of mind, but of Mystery; the Love that is only dimly accessible to the loftiest speculation, unless the light of Revelation is available. On this Love Dante makes St. Thomas speak; and just as Virgil is the symbol of Reason and Beatrice the symbol of Revelation, so is St. Thomas, it would seem, the symbol of the synthesis of Virgil and Beatrice, of Reason and Revelation, of philosophy and Faith. In part, this is what St. Thomas says:

All things that die and things [like souls and angels] that do not die, are but the reflections of the Divine Idea which the Divine Life brings forth and at the same time loves.

From the Divine Lamp of Life and Light and Love the Light rays forth, but in such wise that the Three in One remain as undiminished and undivided as before;

And this Light sent forth by Love is focused, as in a mirror, in nine subsistences, and yet the Unity of God remains eternally immutable.

The Rays descend through the actualization of one potency after another until they reach the last of least-lived contingencies;

By which contingencies I mean the things that are generated, by semination or otherwise, under the influence of the stars.

The wax [or prime matter] of such things and that which moulds the wax [the form] are not uniform; and so it is that the Divine Seal is stamped more faintly in one case than in another.

So does it happen that trees of one species bear poorer and better fruit; and men are born with varying aptitudes.

Nature does her stamping haltingly, working like an artist that knows his craft but has a trembling hand.

But if warm Love dispose Clear Vision in the Primal Power, then perfection in the stamping is complete.

So was the clay [in the case of Adam] made wholly fit for life and its perfection; so [in the case of Christ] was the Maid made Mother by the Holy Ghost.<sup>14</sup>

There you have a Dante who had mastered the sublimest speculations of St. Thomas on the Trinity and Creation. The passage is an expansion of the double idea that *bonum est diffusivum sui* and that "the creative power of God is common to the whole Trinity."<sup>15</sup>

#### Love, Philosophy, and Art

So it is that Dante finds Love as the link between Nature, Man, and God. All love is one because in a real (if analogical) sense the Goodness of God is revealed in the Good which is in Nature and in Man. "In the excellences of nature and of reason the Divine Goodness manifests itself."<sup>16</sup> This Good is at once the object of love,



and the source or principle from which all "love" flows.

Love in Dante, however, looks not only to the Good, but also to the True and the Beautiful.

Dante was at extraordinary pains to show that some of his most passionate poetry was addressed to Truth. Thus when he wrote:

*Amor che ne la mente mi ragiona*  
(Love that holds discourse within my mind),<sup>17</sup>

and:

*Voi che 'ntendendo il terzo ciel movete*

(O ye who by your understanding move the third heaven),<sup>18</sup> and other allegorical *canzoni*, he meant by Love the pure contemplation of Truth. "I say and affirm that the lady I was in love with . . . was that most lovely and most lofty daughter of the Emperor of the Universe to whom Pythagoras gave the name of Philosophy."<sup>19</sup>

In Dante's earlier songs, as we saw, Love was the love of Beauty. In the maturer *canzoni* it is the passion for Truth that spurs his inspiration. In the *Divina Commedia* his central vision is that of the Good in the triple world of matter, mind, and Mystery. And yet at no time can you separate in Dante the lover, the philosopher, and artist. He was a poet, a man with a passionate vision of things and thoughts and dreams; but such a poet that for him Love was not only the link between the True, the Good, and the Beautiful but the link between Nature, Man, and God.

## REFERENCES

1. *Purgatorio*, xxiv, 53.
2. *Vita Nuova*, xx.
3. *Purgatorio*, xvii, 91-105.
4. *Purgatorio*, xviii, 19-39.
5. *Ibid.*, 46-49.
6. *Purgatorio*, xvii, 91-93.
7. S.T. I-II, 28, 6: ". . . Omne agens, quodcumque sit, agit quancumque actionem ex aliquo amore."
8. *Purgatorio*, xviii, 31-33.
9. S.T. I-II, 26, 2: "*Prima ergo immutatio appetitus ab appetibili vocatur amor, qui nihil est aliud quam complacentia appetibilis; et ex hac complacentia sequitur motus in appetibili, qui est desiderium, et ultimo quies, quae est gaudium.*"
10. *Paradiso*, i, 103-135.
11. S.T. II-II, 180, 2, ad 3m: "*. . . pulchritudo . . . consistit in quadam claritate et debita proportione. Utrumque autem horum radicaliter in ratione invenitur, ad quam pertinet et lumen manifestans, et proportionem debitam in aliis ordinare.*"
12. S.T. I-II, 26, 2: "*. . . et ipsa gravitas, quae est principium motus ad locum connaturalem, propter connaturalitatem potest quodammodo dici amor naturalis.*" See also S.T. I-II, 28, 1 and S.T. I, 103, 2, ad 2m.
13. *Paradiso*, i, 131-132.
14. *Paradiso*, xiii, 52-84.
15. S.T. I, 132, 1: "*Virtus autem creativa Dei est communis toti Trinitati.*"
16. *Convivio*, III, ii, 8. All references to the work are to *Opere di Dante* (Testo critico della Societa dantesca italiana, Firenze, Bemporad, 1921.)
17. *Convivio*, III, canzone.
18. *Convivio*, II, canzone.
19. *Convivio*, II, xvi, 12.

# Causality and Quantum Physics

HENRY F. BIRKENHAUER

Xavier University, Cincinnati, Ohio

IN 1900 Professor Max Planck proposed his Quantum Theory to solve a problem of heat radiation. His explanation broke away rather sharply from the Classical Physics of the century which had just ended, and his views were slow to gain acceptance among scientists. However it was found that the new theory not only solved the problem in question but also explained a number of other puzzling natural phenomena. Confirmation followed confirmation in different fields of physics, and today the Quantum Theory is acknowledged as a basic law of nature.

The Classical Physics of the nineteenth century had regarded the flow of energy as continuous; Planck's theory stated that energy-flow was discontinuous and that the units of energy were emitted from their source according to "the principles of probability."<sup>1</sup> Thus it is not surprising that The New Physics has come to take a new view of the physical world, looking upon activity in nature as somewhat random and not altogether predictable.

But what is surprising is that disciples of quantum physics have questioned several aspects of *causality* in nature. Philosophic truths, it would seem, could not be called into question as a result of scientific discoveries; however contemporary writers do not hesitate to reject or accept metaphysical principles merely on the basis of newly discovered physical facts or current theories. The following, therefore, will consider whether developments of the Quantum Theory really do furnish premises for

affirming or denying these aspects of causality, viz., the principle of causality, necessary causation, and the existence of free will.

Most of the developments of the theory of Planck are strictly mathematical in character; they are equations describing various physical processes. However, quantum physics does imply two new scientific viewpoints, and it is these which are generally considered to have philosophical implications. The first viewpoint concerns future activity and its predictability; it is the application of probability to change. The second concerns rather the present state; it is the inexactness involved in determination of position and velocity.

## Probability

How could Planck's concept of probability as introduced in his theory be used as an argument in regard to causality? This becomes clear when the scientist's meaning of probability and of cause is explained. When the scientist says that one event is more probable than another, he means that the former will occur oftener than the latter if a very large number of trials be made. And the reason why the former happens oftener is that there is a greater number of possible ways in which it can come about. But although there is regularity in the aggregate effect in many cases, each of the individual events is determined purely by chance. Thus, for example, with dice: if many throws are made there is a constant proportion between the number of twos and the number of



sevens thrown. But it is mere chance that a two should result from any particular throw. Similarly it is mere chance which determines that a red quantum rather than a violet one should be emitted from a certain incandescent solid, even though the aggregate result will show regularity. The one outcome is more probable than the other simply because the number of possible accidents for that one is greater than for another; the *chances* for that one are greater.

Probability, then, as applied to activity may be described thus: State A may be followed by state B or C or D. The chances for B may be overwhelming, yet because this outcome is only highly probable, the activity is neither absolutely inevitable nor necessarily unique. Furthermore, the individuals in the process move entirely by chance. One has as little right to call their activity inevitable as he has to call the outcome of a throw of dice or the spinning of a roulette wheel inevitable.

#### *Inexactness in Determination*

The second development of the Quantum Theory, inexactness in determining present conditions, is very similar to probability. Both express a lack of exact knowledge of some natural phenomenon. Thus the modern scientist describes future changes in terms of relative probabilities. But suppose he is investigating not what a body will do but what it is doing now. If he wishes, for example, to determine exactly the position and velocity of a particle at a given moment, he cannot succeed; because by Heisenberg's Principle of Uncertainty, the more accurately the position is determined, the less accurately can the velocity be measured. To measure the position of a particle one must project some sort of radiation upon it. The more intense the radiation, the more exact can be the determination of position. But at the same time, the more intense the radiation, the more is the velocity interfered with by that very radiation, and consequently the less exactly can the velocity be measured. Hence these inaccuracies cannot be eliminated with more advanced experimental technique. This fact has been well expressed thus:

It is important to emphasize that these uncertainty relations are in no sense dependent upon defects on the part of the observer or of his instruments of measurement. They are wholly due to the fact that some means of measuring must be used, and the means of measuring affects what is to be measured.<sup>2</sup>

That changes of state can be determined only probably and that particular conditions can be measured only to a limited degree of accuracy—these are implications of the Quantum Theory in physics. But do the consequences of this theory likewise imply a revision of the metaphysical principle of causality?

#### *Causality*

By causality the scientist means, in one word, predictability. Historically, this meaning came to be attached to the term because many of the great scientific discoverers of the sixteenth and succeeding centuries had abandoned metaphysics. They described natural phenomena in terms of laws which presupposed the constancy of nature's activity. Taking it for granted that bodies of a given kind would always act in the same way under like conditions,

they could make predictions. They would say that nature was acting causally when it was acting predictably. In other words, a cause, for science, is not, as for metaphysics, a being which by its physical action *produces* another; for science a cause is merely a being which always *precedes* another. Given the antecedent the consequent can be predicted. The nexus between the two is neglected by science, although that connection is the particular concern of philosophy regarding efficient cause.

Now the Quantum Theory denies on principle that absolute predictability can ever be completely verified, for that is impossible when only relative probabilities can be specified. Predictability is further thwarted on the score that the initial conditions can never be fully known, since position and velocity can never be simultaneously determined beyond a certain degree of accuracy. Science can tell what the configuration will most probably be and it can very nearly determine the initial conditions but it cannot predict with certainty. Thus if science conceives the principle of causality as requiring that every cause must have a definitely predictable effect it must reject that causality.

But it is not the true principle of causality which scientists have denied. They have rejected a law which they had formulated independently of metaphysics. The law which they call causality may be stated: bodies always act in the same way under the same *observed* conditions. Obviously this cannot be held in face of probability and inexact determination. But the philosophic principle of causality, that every contingent thing requires an efficient cause as the sufficient reason for its existence, needs no revision because of the New Physics. Whether the physical dimensions of the existing body can accurately be measured or not or future configurations predicted, new existence does require a sufficient reason, namely its efficient cause. Whatever else may be inferred from the Quantum Theory, the possibility of an uncaused contingent event does not follow.

#### *Indeterminism—Necessary Cause*

Among the apparently legitimate developments in quantum physics is the principle of indeterminism, as it is sometimes called. It is stated: Natural bodies do not act with necessity, since any one of several states may result from a given configuration. This development of the theory of Planck denies that bodies are necessary causes. This denial may seem to be justified by the following argument. Now although natural bodies do show regularity of movement in activities involving large groups of units, this regularity is only statistical, i. e. it is an average of innumerable *chance* events. The activity of the individual atoms or quanta is not predetermined. Hence it is false to say that bodies act in only one way with necessity.

The answer to this objection has been well formulated by James A. McWilliams. He takes the example of the constant pressure of a head of steam on a square inch of a boiler's surface. This regularity on a comparatively large scale must be viewed by the indeterminists as the



average of a great many impacts of molecules moving by pure chance. He continues:

To have a case of total irregularity, or "pure chance," you would have to suppose that any molecule of the steam might move at any speed whatever from zero to infinity, in any direction whatever, regardless of what other particles might be in the way, at any time whatever and independently of any law of impact. Such irregularity on the minute scale would yield no regularity on any scale. That we *have* regularity on a large scale is a fact, and the only legitimate conclusion from this fact is that there cannot be "pure chance" on the molecular or electronic scale.<sup>3</sup>

In other words, the units which take part in a process must also act regularly, for there would otherwise be no constancy at all in nature. Even if we cannot *specify* "the exact and immediate determinants which brought about each particular event"<sup>4</sup> (this is probability), even if we cannot *determine* individual conditions beyond a certain place of decimals (this is uncertainty), we can *know* the large-scale regularity in nature, a regularity which is impossible unless the small-scale processes take place under the restrictions of fixed laws. Hence we are justified in concluding from this regularity that physical bodies act as necessary causes. The Quantum Theory does not invalidate the evidence for necessary causality in nature.

#### Free Causes

A final application of scientific conclusions to the problems of causality is made in the domain of free causes. Since nature's activity is unpredictable, it is argued, human freedom is perfectly understandable. Probability and uncertainty are signs of indeterminism; but what is not determined is free; therefore physical causes (both men and atoms) are free. May the freedom of man's will then be legitimately proved from the new facts of science?

Just as it was important to understand what the scientist means by the noun "causality," so it is important in this question to see what he means by the verb "determine." For him a state or activity is determined if it is one definite, measured, or measurable thing. Thus a point is determined if its position is accurately expressed; a change is determined if all its phenomena are described in mathematical equations. "Determined" means definite, describable, measurable.

When the philosopher says that the human will is not determined, is this the meaning of the verb which he has in mind? By no means. He willingly grants that each act of the will is a single determined volition; it is this one action proceeding from a sufficient cause. He applies the word *determined* not to an event but to a *power* of activity. The nature of this power is known from its acts.

Physical bodies evince every sign that their principle of activity is determined to one thing, is capable of producing only one thing under specified conditions. Human beings know from introspection, from the study of other men, from facts such as law, guilt, morality, that their principle of activity is not determined. The human will, given all the requisite conditions, is capable of determining itself, of acting or not acting, of choosing this or that.

#### Arguments, Methods, Conclusions

Hence the indeterminist's argument for human freedom, just as his argument against the principle of causality and necessary causation, is valueless because the middle term of his argument is used twice in different senses. For the scientist, causality means predictability; when the Quantum Theory showed that absolute predictability could not be had, some thought that universal causality had to be abandoned. For the scientist, physical necessity means regularity; when statistical laws seemed to postulate microscopic irregularity, some thought that necessary causation could not be held. For the scientist, determination means measurability; when the Principle of Uncertainty was proposed, some thought that all causes might be called free.

This exposition is not meant as a criticism of scientific method. Scientists, since they do not deal with ultimate causes, may justifiably describe phenomena in terms of laws based on the uniformity of nature. These laws will be valuable inasmuch as they enable us to predict; hence the scientific approach to the problem of causality may well be to seek knowledge of what will happen. However, the philosophical approach to the problem is to seek the sufficient reason for change. A sufficient reason must exist for every new being; hence the philosophic principle of causality is universal.

The Quantum Theory, therefore, does not furnish premises which invalidate the principle of causality (understood in its philosophical sense), nor does it lead to the conclusion that necessary causation (again in its philosophical sense) does not exist. And finally, human freedom receives no new confirmation from the New Physics.

#### REFERENCES

1. Sir William Dampier, *A History of Science and Its Relations with Philosophy and Religion* (Macmillan, New York, 1936) p. 42.
2. L. Susan Stebbing, *Philosophy and the Physicists* (Methuen, London, 1937) p. 181.
3. J. A. McWilliams, S. J., "Contingency in Physical Laws" *Proceedings of the American Catholic Philosophical Association*, Vol. XI (Catholic Univ. Press, Washington, 1935) pp. 52, 53.
4. *Idem*. p. 53.

[Continued from p. 32]

wards which he necessarily directs every exercise of his activity.

From this we come to understand how for St. Thomas the order of finality expressed by natural volition and the order of efficient causality corresponding to the deliberate exercise of volition are necessarily linked to each other. We understand, too, how both necessarily depend on the

active capacities of the nature upon which they are based. A nature can tend only towards the good which it is able to attain.

Therefore to human nature viewed in its essential conditions there corresponds an ultimate end to which that nature is necessarily directed in its primal act. This ultimate end really terminates both man's natural inclination



to his good and perfection and the realization of that perfection by the exercise of his operative potencies as set in motion by deliberate volition.

According to the Angelic Doctor, this natural end of man is the possession of the Divine perfection, not indeed as the latter is in itself, but rather as it is manifested in the created universe. In creating the world, God wished to achieve a finite expression of His perfection. This expression is constituted by the joint assemblage of all creatures; to it these creatures tend and to it each contributes according to its form. Though God created this expression of His perfection for His own glory, He also created it for its own sake,<sup>6</sup> or rather for the sake of the spiritual being which is the essential element of that expression; for the spiritual being alone is capable of realizing this expression and of finding in it a happiness analogous to that which God Himself enjoys in the possession of His infinite perfection. We see now that the spiritual creature is truly the end of the created universe; indeed, the universe is the ultimate natural good of this creature which is ordained to possess and to realize it by its concurrence and its particular perfection. It is in the possession of this analogical expression of the totality of being which corresponds to his natural position as part of creation that man would naturally have found his happiness and the satisfaction of the demand expressed by his natural volition for completion and perfection.

#### *Supernatural Beatitude and the Psychology of Human Volition*

What we have already said about the conditions and exercise of the human will holds for man considered in his natural state. But are the conditions equally applicable to man considered in relation to his call to a supernatural end?

In answering this question we may make a distinction. Evidently the conditions of volitional activity based on the essential characteristics of human nature cannot undergo a change, whatever the concrete state of man, natural or supernatural, might be. And so the exercise of the human will must always imply a movement towards good, in its primal and secondary acts, both of which are directed towards man's last end, but each according to its own nature. On the other hand, the nature of this last end will, none the less, demand an adaptation of these conditions to the last end to which man is actually directed.

It is evident that the direction of man towards his supernatural end cannot leave human nature in its natural state corresponding to its essential and specifically natural conditions. If man is called to his supernatural destiny, his nature must needs be "finalized" to this new form of a complete perfection, so that this new end may answer a new exigency in his nature. It is, in fact, the opinion of St. Thomas that every last end always corresponds either to an essential or an accidental demand of the nature which tends towards that end. This is an ontological postulate which is as it were nature's subjective preparation for its end; an exigency which at least inchoatively adapts and proportions nature to that end, as to its necessary com-

pletion. It is plainly evident that the human will, considered as the faculty presiding over man's good and by its exercise expressing the necessary tendency of man's nature towards his total perfection, is not such as to be equally fitted to desire man's natural and supernatural end as his necessary good, so that to arouse in man's will the desire to possess his supernatural end it would suffice to present that end to him. But it is as impossible for the will naturally to desire the absolutely perfect Good as its last end as it is necessary that, once called to this perfection, it be directed towards that end as to the ultimate good which it necessarily demands, even as in the natural order it lays claim to the last natural end to which it is naturally and necessarily directed.

Therefore there must be in human nature as called to supernatural beatitude a new subjective disposition, a new demand prior to every deliberate exercise of volition; prior too to faith and sanctifying grace.<sup>7</sup> For in the form of a necessary, indeliberate need for an absolutely last end this disposition "finalizes" human nature to its supernatural destiny. According to principles of Thomistic psychology, this subjective disposition can be only a new primal act of the volitive faculty; for if the natural primal act of volition "finalizes" human nature to its last natural end, there must be an indeliberate first act of volition, corresponding to the ultimate supernatural end of human nature which necessarily directs that nature to its new last end. God does not impose upon man in a purely juridical and exterior manner the latter's supernatural destiny. This new primal act of volition is certainly not in any way essential to human nature, as is the natural primal act of the will. The former is only hypothetically necessary; and only man's divine call to his supernatural end can awaken the act in the will considered as potency.

But to make this new primal act of the will possible, the *virtus volendi* (power of willing) which constitutes the will as a potency, must be sensitive to this new natural determination; that is to say, the movement towards the complete good of the being must include within its object the supernatural perfection of human nature. There must already exist naturally in the very essence of the human will, and prior to every call to a supernatural end, a certain innate desire for this end.

According to St. Thomas this is indeed the case. This innate movement, constitutive of the will as potency and caused by God in man's nature, necessarily affirms a relation to a real term. This term can be none other than God, from Whom the movement proceeds. And evidently God is the term as He is in Himself, and not simply as He can naturally be known by man; for the movement is not contingent to man's cognition of his object. But this movement towards man's complete good, constituting as it does the will as a potency, is actuated in the form of volitional activity only in the measure to which human nature is proportioned to the realization of its object.

In the natural order, human nature would have been directed to the possession of God and of the Divine perfection only according to the manifestation of this per-



fection in Creation. This is because man naturally forms part of the created world, and he would have found his perfection in the natural totality constituted by the created universe, a totality to which he is naturally ordained. The *virtus volendi* would thus have been determined in its primal act according to this form of human perfection; man would naturally have willed this degree of perfection which would have finalized his volitional activity. In the natural order, as a consequence, the movement toward God which constitutes the will as a potency would not have been actuated according to the totality of the object to which it is naturally ordained, but only according to a limited and analogical participation of this object.

But in the supernatural order, man is called to share in the Divine life, and in the Divine perfection as it is in Itself. Consequently, only in the possession of God as He is in Himself can be found the perfection of man's nature corresponding to this new state. Henceforward it is this perfection that he necessarily wills in his first act of volition. This gratuitous vocation actuates man's *virtus volendi* according to the totality of its object. Consequently, the effect of the Divine call is the awakening in the will and in human nature of a new finality, a new and greater demand for complete perfection, a need for supernatural happiness henceforth to be man's only *real* last end.

The Divine call of man to his ultimate supernatural end is not then simply an exterior calling. Prior to every exterior calling, God's call has already reechoed in the depths of human nature, to arouse therein a new desire, a new primal act of volition, a need that human nature had never till then known, of possessing the perfect Good as It is in Itself. Man's call to supernatural perfection has modified his nature ontologically, actuating therein some mysterious capacities and in a certain manner directing his nature to a good, the existence of which he had not even suspected. True, this direction is remote; for here we are not yet concerned with sanctifying grace nor with an act of faith nor even with the *habitus fidei*. But we are concerned with that previous subjective disposition which is the need of and a demand for the absolute ultimate end, expressed by a first act of volition.

This new primal act of volition will connote, as does natural volition, a certain innate knowledge of its object; not indeed revelation, nor a knowledge of the truths of faith possible to man only by exterior positive conditions of supernatural beatitude; but an implicit knowledge that the object of this necessary volition is beyond all finite good, and can only be the Infinite Subsisting Good as It is in Itself.

Since all finality in the strict sense of the word implies as a necessary correlative the active capacities for the realization of the term of finality, man's call to supernatural perfection will also necessarily imply on the part of God an adaptation of both subjective and objective conditions of human actions to the demands of man's new destiny.

Thus, beginning with the movement towards the complete good of human nature, a movement which constitutes the will as potency, man's exercise of volitional activity is

open to development upon two distinct planes between which this movement establishes a certain continuity. Starting from a dual primal act of volition according to a double complementary finality, this activity may be exercised with a view towards acquiring in its plenitude the object to which the movement towards good has a transcendental relation. This object is the subsisting perfect Good, God as He is in Himself. The first of these finalities is natural and essential to human nature, and directs man to the possession of the perfect Good though only in its created manifestations. The second finality is supernatural and gratuitous, directing the human will to the perfect Good as it is in itself. To this dual finality there corresponds a dual beatitude, in the sense of a *quietatio appetitus* (repose of desire), an appetite which is expressed in the two cases by a primal act of volition. This dual beatitude does not correspond to two stages of realization of one and the same last end; for this would imply only one finality. Rather it corresponds to two distinct ends, each of which has in its own order the mark of totality that characterizes every last end. But for the first beatitude this totality, considered in itself, is only relative, while for the second the totality is absolute. St. Thomas says:

With respect to the perfection of finality, man is perfect in two ways: first according to the capacity of his (own) nature, and secondly according to a certain supernatural capacity. In this second way man is said to be absolutely perfect; but in the first way, relatively perfect.<sup>8</sup>

These seem to us to be the metaphysical conditions of the willing of supernatural beatitude as viewed in the light of Thomistic principles.

#### *The Meaning of the Natural Desire to see God*

The conception of human volitional psychology just presented will permit us, we believe, to explain what kind of natural desire to see God can exist in man's will considered absolutely in its essential constitutive conditions.

This desire for the sight of God is the very movement itself which constitutes the will as the appetitive potency of human nature. Considered in this way, precisely as volitional potency or *virtus volendi* and not as already in act, the will is a natural inclination towards the complete and absolute good of man. This inclination affirms an essential transcendental relation to a real object which in itself satisfies perfectly man's every wish and desire. This object can be none other than the Subsisting Good, God as He is in Himself, for He alone contains in Himself every form of what is and can be good for man. If then God as the Subsisting Good can really be willed by man, it is He who ought to constitute the total object of volition to which the will considered in itself as a potency is necessarily ordered.

The natural desire to see God is therefore an innate desire—an *inclinatio naturalis*, to use St. Thomas' words,—since the movement that constitutes the will as a potency is an innate inclination, produced immediately by God in human nature as the innate appetite of inferior beings are produced. But this inclination is not a *pondus naturae* connoting the necessary finality of human nature to supernatural good; for finality, understood in the proper sense of a tendency that demands its term, appears in the will only in the form of a natural volition, the first determina-



tion of the movement towards what is good. Human nature is not finalized by this movement, but by the primal act of volition expressing the demands of human nature for perfection. The relation of the movement towards what is good, the relation of the *virtus volendi* to the Subsisting perfect Good, is naturally prior to the finality of a being. This finality serves only to point out how far the activity of the being can go in the possession of this perfect Good.

But if the transcendental relation of the will to the perfect Good does not mean finality properly so called, we may say that it expresses a radical finality of human nature: an inchoative but incomplete finality ordained indeed to the absolute and final good, but not yet determined and for this reason inefficacious. The same relation expresses the absolute capacity of human nature for perfection, a capacity for which there must be a corresponding term. And to this term the will must necessarily be carried in a certain virtual manner, even if it cannot tend towards it actually.

Since St. Thomas believes that for every finality there is an active proportional capacity for realization of the end willed, it must be said that in human nature there is for this radical finality a corresponding radical capacity for the realization of the term. This capacity is nothing but the natural activity itself.<sup>9</sup> The supernatural does not so transcend nature as absolutely to exclude every foundation in the latter, though it is true that nothing purely natural is formally supernatural. Man does not advance towards his last end in virtue of an activity foreign to his nature in which his nature would be purely passive. Rather he advances to his end by his own nature, by an activity which is natural although strengthened and elevated.

The natural desire to see God implied in the *virtus volendi* is not of itself then an elicited desire. This is because the movement towards good which constitutes this desire is not an exercise or act of volition, even the primal act, and because the transcendental relation to man's last good, a relation affirmed by the movement itself, does not arise from the knowledge even implicit, of the term of this relation. It must likewise be said that this desire exists in the depths of the will of every man: it is a desire necessary and essential since it constitutes the very nature of the will. It is necessarily exercised, at least in an inchoative and radical manner, in every exercise of volition; for every act of the will is only the determination of this movement towards God in pursuance of an object contained in the sovereign Good in an eminently superior manner. However, this movement can be exercised in accordance with its adequate object only to the extent to which this object can be known with certitude to be an attainable or at least possible good for man.

Still and all, could not this natural desire to see God express itself, even in the natural order, in the form of some kind of elicited desire of attaining to God in Himself: for example, on the occasion of our learning of His existence as cause of the created universe? To this question we must reply, as we believe that what is true in the case of

the knowability of the supremely Knowable is likewise true of the desirability of the supreme Good. Though in Himself purely intelligible, God still cannot be known naturally by man according to His proper form; so too, though eminently desirable in Himself, He cannot naturally be desired as He is in Himself, at least not by a desire that would with certitude recognize in this object a good that enters into what is naturally the good of man. In the natural order such a desire would have been only the expression of a supontaneous wish; one that would have remained uncertain of itself, unable to base itself with certitude upon the possibility of its object, and with nothing of the urgent character of a natural aspiration. However that may be, after his elevation to the supernatural order and after the knowledge of his new destiny, man could recognize in such a spontaneous desire a sort of levelling-off in consciousness of that innate desire which naturally propels the will towards God, and so would recognize in it a value which previously he could not be certain it possessed.

Now if we consider man's condition as called to his supernatural end we must conclude from what we have already said, that there is in his will a natural desire for the sight of God, but one of another nature, a truly elicited desire, which constitutes the *primary act* of his will corresponding to his new destiny and expressing his new finality. Under the supposition of man's call to supernatural happiness a primal act of this kind, as we have said, is a necessary exigency for finalizing human nature to its supernatural end. Henceforward, this end is to be his only true last end; for man elevated to the supernatural order natural beatitude is no longer a last end, capable of satisfying his need for perfection.

As these are the conditions of humanity considered in the light of history, it must be said that this kind of desire is now to be found in every man, even in those whom the revelation of supernatural truth has not reached.

We must conclude from this that the actual psychology of human desire is completely changed, and no longer bears resemblance to what it would have been had man been left in his natural state. For in the natural order, the center of human desires would of course have been the divine perfection, but only insofar as the created universe could manifest that perfection and not as it is in God Himself. On this score, created values would have had for the human will an attraction, a power of fascination, and a fulness which they can no longer have, now that a necessary aspiration carries man beyond every finite good. In the natural order one may say that man would have been much more interested in creation than in God, Who would have appeared to him as First Cause, transcendent and inaccessible, rather than as the highest Good. And God, on His part, would have had only the relation of cause to effect with His handiwork, and not the relations of person to person which characterize the supernatural order. But in the present state of mankind, the basic need and essential interest of human nature lead it, at least implicitly and by means of a necessary volition, towards



God Himself as towards the only principle of its perfection and happiness.

This need for God must not be thought of as subsequent to the grace of Faith or to the knowledge of revealed truth discovering to man his supernatural destiny and arousing in his will the desire to attain it. As we have already explained, this need for God must necessarily exist in human nature as the primary effect of man's call to his supernatural end. This need is coextensive with God's call, and as universal as is God's will that all men be saved. It is awakened in the human will in the form of a primary volition, finalizing the will to the absolute and perfect good, to supernatural beatitude, just as in the natural order natural volition does for man's ultimate natural end. Moreover, this primary volition, if not determined in the secondary act by the deliberate exercise of volition of the supernatural good, has absolutely no merit.<sup>10</sup>

True, in many men this tending towards God remains obscure and implicit, especially so long as the knowledge of revealed truth does not permit the tendency to become explicitly conscious of itself. But the consciousness is not for this reason rendered less active. It constitutes in particular the psychological disposition necessary to receive revelation and to understand the signs that manifest the latter. Then again, a well-conducted phenomenological analysis of human desire, one consequently such as is revealed in the present human activity, would certainly end by demonstrating the desire of this absolute final good in the concrete psychology of man.<sup>11</sup>

### Conclusion

We do not regard as superfluous a résumé of our arguments on the meaning to be attributed to the natural desire to see God in accordance with the Thomistic principles of human volitional psychology.

In man considered absolutely, namely according to the conditions of his nature, there is no natural *elicited* desire to see God, implying the necessity and universality proper to such a desire. But man does have an innate desire for the sight of God, as adequate object of human volition, containing in Himself every good and every possible desirable object. This desire is the very essence of the will considered as a potency; but only consequent upon the call of man to his supernatural destiny can it translate itself into act and formulate itself into an elicited desire certain of its object. This innate desire might perhaps have sometimes been expressed in the natural order under the form of a wish which is spontaneous and prior to any reflection about the possibility of its object. But man would have been incapable of comprehending the true import of such a desire and of recognizing therein "the traces, in the consciousness he has of himself, of certain scarcely audible appeals of his nature." But

That which, in the absence of the Divine gift, would only have been transferred into something akin to appetite, in the midst of an impenetrable obscurity, can, thanks to the gift of Faith, be formulated in a clear series of syllogisms. Thus does one construct the probable system which links reason and revelation with these middle terms: the insufficiency of human speculations and the desire to embrace in Himself the First Knowable.

These words of Père Rousselot, regarding the question under discussion in this article seem to us to express perfectly from what angle we must approach the passages of St. Thomas of which we have tried to give an explanation.

### REFERENCES

1. Of itself therefore, *primo et per se*, the will is not, metaphysically speaking, the faculty of good in general and but consequently of the being's complete good. First of all, it is the faculty of the entire good, and consequently of every form of and every participation in this entire good. From the metaphysical point of view, man is capable of willing every good because he tends towards his complete good and it is because of the nature of his complete good that every being is a good for him.
2. S.T. I,60.1; I-II,10.1; *De Ver.* 22.5., etc.
3. S.T. I,5. 1, ad 1; *De Ver.* 21.5.
4. The natural and necessary volition of the true last end does not exclude the possibility of sin, nor does it exclude freedom (See 2 *Sent.* d.39, 1.c; *Ibid.*, 2,2, ad 4; 3, 1.). Sin has only a *deliberate* act of the will for its source, and so is essentially a positive determination of the will, though in opposition to the first act of the latter.
5. *De Ver.*, 14.2: "*Nihil potest ordinari in aliquem finem nisi praexistat in ipso quaedam proportio ad finem, ex quo proveniat in ipso desiderium finis; et hoc est secundum quod aliqua inchoatio finis fit in ipso: quia nihil appetit nisi in quantum appetit aliquam illius similitudinem. Et inde est quod in ipsa natura humana est quaedam inchoatio ipsius boni quod est naturae proportionatum.*"
6. St. Thomas believed that there was no contradiction in saying that the created universe should be for God and for itself: "God wills the created universe for itself although He wills its being for Himself; for these two things are not in opposition. For God wills the existence of creatures on account of His goodness: that is, in order that they may imitate and represent it in their own way. This they do insofar as they have being from Him. . . . Thus it is the same to say that God made all things for His own sake. . . . and that He made creatures for their existence (and perfection)." (*Deus creaturarum universitatem vult propter seipsam, licet propter seipsum eam vult esse: haec enim duo non repugnant. Vult enim Deus ut creaturae sint propter eius bonitatem, ut eam scilicet suo modo imitentur et repraesentent: quod quidem faciunt in quantum ab eo esse habent. . . . Unde idem est dictum quod Deus omnia propter seipsum fecit. . . . et quod creaturas fecerit propter eorum esse et perfectionem.*)
7. In a nature called by God to supernatural beatitude, neither the loss of sanctifying grace, nor even the loss of faith, suppresses this demand which is in no way dependent on free will.
8. *De Virtutibus* 10.
9. This active radical capacity for realizing the last and absolute perfection insofar as this capacity connotes the possibility of being completely actuated by God, is precisely human nature's *potentia obediuntialis* towards God's attraction by grace to man's supernatural good; this potency does not consist in a pure non-contradiction, nor in a pure passivity, but it implies a certain finality as well as a radical and incompletely determined activity.
10. This first volition is, it is true, a grace, since it is a gratuitous gift of God, and a supernatural grace by reason of the term to which it inchoatively directs human nature and the human will. But this grace is prior to the gift of Faith and does not as yet constitute in a positive manner the *inchoatio vitae aeternae* which is realized in man by Faith (See *De Ver.* 14.2.c.), but rather the subjective disposition required by Faith.
11. M. Blondel has affected this in *l'Action*. The concrete dialectic of human action as he analyzes it does not begin as some have thought, with human nature considered absolutely, but rather with man in the concrete, with real human nature as it has existed historically. Starting with human nature so understood and from the fundamental and inescapable necessity of acting which expresses that nature's internal dynamism, M. Blondel, by means of the analysis of the dialectical movement implied in action, seeks to reveal the real meaning and significance of this necessary volition affirmed by man's every action, even when the latter refuses to recognize it, and even goes so far as to deny it.
12. Pierre Rousselot, S.J., *L'Intellectualisme de Saint Thomas* (Paris, 1924) p. 188.



## Book Reviews

### PURE JURISPRUDENCE

Francis P. LeBuffe, S. J., and James V. Hayes, LL. B.  
*Fordham Univ. Press, New York, 1938, pp. xxxiii 286, \$3.00*

The first edition of this text for law students was prepared by Father Francis P. LeBuffe, S. J., in 1924. The third edition of the work which appeared in 1938 was completely revised and augmented by Francis P. LeBuffe, S. J., and James V. Hayes, LL. B., member of the New York Bar. The 12 chapters of the 1924 edition are expanded to 14 in the new edition. The two new chapters on American Schools of Jurisprudence and Totalitarian Theories of Law are a welcome addition in this age of dictatorships. The principles of jurisprudence are expounded from the viewpoint of Aristotelian philosophy and over 70 illustrative cases in confirmation of these principles are cited from recent sources. Among the most interesting of these are *De Jonge vs. Oregon*, 299 U. S. 353 and *Gitlow vs. New York*, 268 U. S. 652 which deal with freedom of speech and the press as fundamental rights, and *Meyer vs. State of Nebraska*, 262 U. S. 390 and *Pearse vs. The Society of Sisters of the Holy Names of Jesus and Mary*, 268 U. S. 510 which condemn unreasonable interference with the liberty of parents and guardians to direct the education of children under their control. What a jolt for men like Donald Richberg and other advocates of the Absolute State is contained in the words of the Supreme Court: "The child is not the mere creature of the State. Those who nurture him and direct his destiny have the right coupled with the high duty to recognize and prepare him for additional obligations!"

A splendid bibliography of ten pages, consisting of books, documents and reviews enhances the value of this work. The list of Laws Reviews should include the *Notre Dame Lawyer*. To the books recommended might be added: *The Revival of Natural Law Concepts* by Charles Grove Haines (Harvard University Press, 1930, Harvard Studies in Jurisprudence, Volume IV) and *Recent Theories of Sovereignty* by Hymen Ezra Cohen (The University of Chicago Press, 1937).

Natural Law and natural rights were being called into question by modern jurists when the first edition of this scholarly work appeared in 1924. As early as 1891 Professor M. Taylor of the University of Michigan, while admitting that the Natural Law had practically universal acceptance for 2200 years from Plato and Aristotle to Locke and Kant, nevertheless made this declaration: "A somewhat noteworthy feature of recent social philosophy is the apparently quite general discarding (*italics mine*) of the time-honored doctrine of natural right or natural law."

This third edition of the work in 1938 finds even stronger opposition to the Natural Law concepts which were accepted by the founding Fathers of our Republic. Clarence E. Martin, President of the American Bar Association in 1932 indicated and condemned this opposition, in an address delivered in Chicago, December 2, 1932: "Against these rules of the natural law, the manifestation of the eternal law, there are groups working to change the basic concepts and substitute for them new theories of relative rights and duties of men, under cloak of progressivism." HERBERT C. NOONAN.

■ ■ ■ ■

### A PHILOSOPHY OF WORK

Étienne Borne and François Henry  
 English translation by Francis Jackson  
*Sheed and Ward, New York, 1938, pp. 221, \$2.50*

On account of the threefold aspect of work, it is a term which is often used confusedly. Its elements are *contemplatio*, *actio transiens*, and *effectus*. Human labor, the work considered in *A Philosophy of Work*, is a composite of these three angles, and none of them can be separated from the others in *ordine rerum*.

The authors make too much of their point that man must be both contemplative and active in the making or producing of things. They treat the fact as though it were newly discovered, and go to

undue lengths in their historical contention that Aristotle, and even St. Thomas, were unaware of the close and necessary combination of the two.

There is a labored attempt throughout the book to surround work with a kind of mysticism, and the authors sometimes become lyrical in prophesying a newer and deeper appreciation of work. On page 121 they write: "The presence of the human toiler and of all that his efforts have changed ought to stimulate in our hearts those religious emotions which romantic ages in the past used to look for in the midst of desert immensities."

Perhaps the book suffers in translation. The phraseology, at least, is hardly attuned to American ears. For this reason it ought to be read side by side with some book of Eric Gill, such as *Work and Leisure*. Gill is as metaphysical as Messrs. Borne and Henry, but a great deal more intelligible.

The reason for the modern misunderstanding of work is well put on page 143:

The economic servitudes are such that it is impossible, at least without a miracle, that the modern worker should possess a just view of his work. Everything conspires to make him hate his work, or to cast it into a false mysticism; the fault of this lies in a capitalist civilization which has no respect for the natural finalities of labour.

In general the book is worthwhile reading. Specifically, however, the publishers are to be scored for the lack of an index and for the very meager table of contents.

JOSEPH H. FICHTER.

■ ■ ■ ■

### TRUE HUMANISM

Jacques Maritain

*Chas. Scribner's Sons, New York, 1938, pp. xvii + 304, \$3.50*

M. Maritain continues his office of drawing the necessary distinctions between things different but not separate. The question posed by the author is the following: under what conditions is heroic humanism possible? The answer, in general, is that heroic humanism—it is rightly assumed that humanism must be heroic in order to be true to itself—is possible only on the terms of man's renouncement of self before One greater than self. True humanism, then, must be theocentric. Anthropocentric humanism is radically vicious not because it is humanism but because it is anthropocentric. All attempts from the Renaissance to Communism to rehabilitate the creature, man, by centering his human capital solely in self have failed. Man's life flowers only when at its very bud is recognized one who is *intimus intimo meo*. Thus, although this life is not the next, nor is the Kingdom of Heaven the kingdom of the world, nevertheless it is only the Kingdom of God which can so inform the present life that no truly human good in it may be lost: *sic transeamus per temporalia ut non amittamus aeterna*.

The particular facets of the above general answer are made to illuminate with brilliant clarity an enormous number of special problems. For example:

"Is the working class," asks M. Berth, "in fact capable of becoming a person?" Yes, without doubt, but on one preliminary condition: neither a man, nor a nation, nor a class can be saved by man alone; and if the pelagianism and practical atheism of the bourgeoisie are adopted and exalted by the proletariat, this will entail the latter's historical bankruptcy. Its apparent triumphs will but augment its servitude. Man can achieve his freedom and personality, but only by opening his heart to that Life whence he draws the springs of his being. It is possible that, despite the pessimism of Berth, trade-unionism is at the moment the most considerable and the most promising force of social renovation. But it will only keep these promises if it rejects the atheism of certain of its initiators.

To my eyes the dilemma is inevitable: either the popular masses will become more and more attached to the materialism



and the metaphysical errors which have been for nearly a century the parasites on their movement of historical progress, and then that movement will develop along lines that will lead to deception in the long run.

Or it is by the principles whose deposit Christianity maintains among us that they will shape their philosophy of the world and of life, and by the formation of a theocentric humanism, whose universal value will be able to reconcile, even in the temporal and cultural sphere, men of all sorts and conditions, that their will for social renovation will come to its fruition and they will achieve the freedom of a full-grown personality, not of a class absorbing man into its limits for the destruction of another class, but of man communicating to his class his proper dignity as a man, for the common inauguration of a society from which, I do not say all forms of differentiation or any hierarchical order, but the present-day severance into classes, will have disappeared (pp. 233-234).

The writing is sustainably excellent. No one will easily forget, for example, M. Maritain's "action is the epiphany of being," tossed off *comme si de rien n'était*; and yet how many have sweat in vain to render *operatio sequitur esse*? Still, in a style whose texture is like a mosaic, the tiniest slip of printer or translator makes a reader wish to heaven for the original French. "... despotic degrees [decrees?]" (p. 10), for instance, does not seem right. Nor does the punctuation on p. 237 of "On the one side. . . of the commonwealth?" Nevertheless anyone who has tried to render Maritain into English will be slow to criticize another's translation, even though it is true enough that you do not have to be a hen to know a good omelet. Likely this is the best of the translations yet made of Maritain.

GERARD SMITH.

## ST. THOMAS AND THE GENTILES

Mortimer J. Adler

Marquette Univ. Press, Milwaukee, 1938, pp. 111

Dr. Adler's latest offering to Scholastic thought in America comes in the form of this singularly refreshing and candid essay. Invited by the Aristotelian Society of Marquette University as the Aquinas lecturer for 1938, he chose to perform his task not by indulging in the pleasant exercise of praising Thomas, but rather by considering the status of his disciples.

Under rigorous examination, Dr. Adler finds that we are very much at fault. We professed ourselves followers of the great medieval thinker, yet we neglected those stern dialectical tasks by which philosophical thought must ever live. Our concern has been a vain rhetoric. As a result we have lost ground, and the Thomist of the twentieth century is put down as the cultivator of just another "ism,"—"and an anachronism at that."

The indictment is a strong one, for we have learned from St. Thomas that the office of the philosopher is twofold. He must not only discover truth, but propagate and defend it. Our essential failure lies in the field of the latter. We have not made a case for philosophy in the world of today.

True disciples of St. Thomas would have followed him in method and spirit. The *Summa Theologica* and the *Contra Gentiles* came from his hand. It was not, however, a mere accident of history that the latter was written first. The polemic was against the gentiles. Three types of adversaries faced Thomas: the Moor, who admitted only the validity of reason; the Jew, who held both reason and the Old Testament; and the Christian heretic, who differed on essential points of doctrine. With the first, Thomas could war with the weapon of rational dialectic only; against the second there was both philosophy and the Old Testament; against the heretic, there was given all three fonts.

It is possible to discover, in terms of a broad analogy, a similar situation in our day. The analogue of the Moor is the positivist in philosophy who equates philosophy with empirical science; similar to the Jew is the systematist, who concedes a validity to philosophy but insists on an irreducible plurality of systems. And corresponding to the heretic is that class of thinkers which differs on particular

points of doctrine. Patient study and long dialectical effort will enable us to accomplish our task. With the positivist we must find a common ground. It is, in this case, the true knowledge that he admits in the conclusions of science. Starting here we may lead him to a discussion of degrees of being, of a theory of knowledge, a philosophy of nature, and finally to metaphysics, including Natural Theology. Against the systematists we can point out that their position results from a confusion of mathematical method with philosophical logic. There cannot be many *systems* of philosophy, because not even one is possible. Lastly we must combat the heretic; and here we can engage him with the very arguments of our teacher, for philosophical error recurs as often as philosophical truth, and Thomas was no tyro at solving ancient error.

A brief review does scant justice to so excellent a book. The argument has been but suggested. No mention can be made of the forty-three pages of notes which reveal the splendid scholarship of the author. The graceful style, the fullness of vision, and the seriousness of the subject should commend this book to all those who have followed with any sort of interest the revival of Scholastic thought.

THOMAS C. DONOHUE.

## A COMPANION TO THE SUMMA II: THE PURSUIT OF HAPPINESS

Walter Farrell, O. P.

Sheed and Ward, New York, 1938, pp. viii + 459, \$3.50

To attempt to review this book without reference to its declared object, would be to reveal that one had not read it. The volume, the first of a projected series of four, deals with the subject matter of the *Prima Secundae*. The author tells us that the series "might best be called an easy guide-book to St. Thomas' greatest work" (Foreword, p. vii). It is evident that not all the matter treated by St. Thomas in one hundred and fourteen questions can be taken up adequately in a book this size; nor do we find all the various details discussed with the same depth. These limitations are necessarily inherent in the plan adopted.

In technical excellence the book ranks high. Prefixed to each chapter is an analytical outline, together with an indication of the questions of the *Summa* covered. The index is good; one might wish it were more extensive. The analysis of modern errors in ethical problems is acute, but sometimes very brief.

This reviewer hopes that the sales of the book will be widespread. Here, for the first time in an American author, the thought of St. Thomas meets us in the brisk, witty style that has too long been the prerogative of the so-called "modern" philosophers. After we have finished but one chapter we feel that the author knows his New York as well as his St. Thomas. The book should prove especially valuable for the non-professional philosopher, for the man who realizes the need for thought on fundamental problems but lacks training in the technical apparatus of Scholasticism.

It is to be hoped that Fr. Farrell's success in *translating the thought* (not merely the words) of St. Thomas will inspire others to *translate* their own thoughts into a living idiomatic phraseology, without sacrifice of depth.

GEORGE P. KLUBERTANZ.

## THE PHILOSOPHY OF LAW OF JAMES WILSON

William F. Obering, S. J., Ph. D.

The Catholic University Press, Washington, 1938, pp. 101

In this book Fr. Obering has done a very creditable piece of work. There is a great need both practical and theoretical for more work in this field. The true philosophy of law is almost unknown in this country. American legal philosophy is an offshoot of the Pragmatism of John Austin, with a mixture of our own peculiar errors, drawn from Rousseau and Jefferson. The practical results of these errors are evident enough to many people who have the welfare of their country at heart. The almost universal corruption and inefficiency in government, the lack of control of those in authority over the people, the great want of social sense and solidarity among so many, the utter disregard for the welfare of the whole country in the selfish pursuit of local interests and individual success, these are all



too evident phenomena. And they are not fortuitous. They grow out of the philosophy of Rousseau, and they are incompatible with any idea of government, free or otherwise. But it was not so in the beginning. The founders of this republic, at least most of the important men among them, professed a theory of government which differs in no important respect from that of Francis Suarez and Robert Bellarmine. Fr. Obering's book points the way back to Hamilton and Madison and Jay and James Wilson. We will take that road or we will find ourselves upon a rougher one.

My attention has been called to a previous review (*The New Scholasticism*, Vol. XII, No. 3, pp. 292-3) which confuses the ideas of philosophy and history in the most acceptable manner of Mr. Jerome Frank and the school of what Mr. Robert Hutchins calls "Digestive Jurisprudence." A book on philosophy is criticised because it is not a book on history. "The Common Law," says the reviewer, "is the effect of many causes, not all of them moral." It is inconceivable that Fr. Obering would deny that proposition. He meant merely to state that all law, as it stands and with no reference to its antecedents, is founded in the Natural Law, or in ethics.

Again, the reviewer advocates a change in our terminology of the philosophy of law in order to reach the legists. He would have us babble their Pragmatist and Positivist jargon in order to make a good impression, and then stultify ourselves by assuring them that it was all nonsense. I question the wisdom of this procedure. I am apprehensive that if we start this compromising, it will eventually result in a compromise of truth. There is no difficulty about terminology. The disagreement is in fundamentals. There lies the main battle.

He considers that the main thesis of Fr. Obering, that "Wilson drew much of his philosophy from Scholastic sources" is not proved. It is my opinion on the contrary that it is hardly necessary to prove. It is almost taken for granted in a dozen works on the subject, for instance *The State and the Church* by Ryan and Millar. The philosophy of Wilson was the philosophy of the English and American Whigs. Burke and Fox were as well known in the colonies as in England for obvious reasons. And Fr. Millar calls Burke somewhere "the last of the great Scholastics." Of the influence of Catholic thought in general and of Suarez and Bellarmine in particular on Whig philosophy and its great mouthpiece, history leaves no doubt.

The book is a credit to the author, to the publishers, and to the sponsors. It is well printed, with a modest number of footnotes and a very scholarly appearance. Let us have many such books. I think so much of it myself that I use it as a secondary text for my classes after eight years' experience in teaching the same subject.

J. P. NOONAN.

### CHARACTER FORMATION IN COLLEGE

Bakewell Morrison, S. J.

Bruce Pub. Co., Milwaukee, Wis., 1938, pp. xvi + 208, \$1.85

Catholic colleges and universities, to avoid the charge of proselytism, have in the past held themselves aloof in regard to the spiritual needs of their non-Catholic students. "Character Formation" offers an excellent solution to this ticklish problem. Judiciously avoiding appeal to any sectarian religious teaching, it unearths a rich mine of purely natural means for the development of character. Today when even contemporary popular literature is trending towards sane natural ideals in a revulsion from post-war sensualism, and social unrest is stimulating search for a more rational philosophy of life, such a book should receive wide welcome from educators, regardless of their sectarian or non-sectarian affiliations. Catholic educators, after a thoughtful reading, will realize anew the force of the ancient adage, "supernature is built upon nature."

Following an attractive analysis of character, the apparatus which man employs to acquire this greatest natural good is succinctly described. Here, as everywhere else in the book, Aristotle and Aquinas are the guiding lights. Since self-control through self-knowledge is the desired goal, and self-control is not despotic but political, the particular problems of Principles, Rules, Resolutions, Ideals, Habits, and

Free Will are lucidly treated. The insistence on personal assimilation of principles, the clever repetition of the fundamental notion of the text embodied in the axiom, "clear ideas and reasons why," and the smooth progression of thought are especially noteworthy. Sane and provocative discussions of Mental Hygiene, Punishment and Fear, Endocrines, Sex, Study, Play, Citizenship and Patriotism complete the first section of the book. The chapter on Citizenship deserves special commendation in these propaganda-choked days when an exaggerated pacifism is abroad. The two case studies of abnormal students and the gallery of collegiate types in Part II will most likely be read first by students; collegians will find themselves neatly pilloried, but the truthfulness of the portraits cannot be denied. An appendix supplies the postulates of the course; they are borrowed from the book *Think and Live* (Morrison and Rueve, Bruce, 1937) which is a preparatory first-semester course to the present proposed course in character formation.

PAUL J. BRUCKNER.

### KIERKEGAARD

Walter Lowrie, D. D.

Oxford University Press, London, 1938, pp. xviii + 636, \$7.50

Dr. Lowrie has given us more than a conventional biography. This book is a *presentation* of the man: we come to know the litterateur, the sage, the zealous theologian. In striking contrast with the biographies of a decade ago, "this book was written by a lover" (p. xvi), and we are grateful that it is so. The sympathy with which the author comes to his subjects tends to induce a like attitude in the reader. There is no suppression of the ignoble qualities in Kierkegaard; they are honestly mentioned, and then with rare common sense left as facts that made impressions on the man's character, or influenced his mode of thought and action. It is not for his faults that we care to read about a man, but for his accomplishments despite them, for his better traits and virtues.

The developmental approach to a man's thought is, we believe, best adapted to give anything like a true understanding. Dr. Lowrie shows that Kierkegaard's thought was present only in embryo in his first works. To bring this clearly before us, innumerable quotations are used. The ordinary reader is particularly grateful that so few of the "philosophical" quotations are introduced (pp. 416, 508). We presume that an accomplished Hegelian could understand them—for everyone else they are "words, words, words."

The biographer's style is, in the main, deserving of praise; here and there, however, certain phrases appear which are foreign to English. There is an index and a useful glossary of Kierkegaardian expressions.

GEORGE P. KLUBERTANZ.

### CATHOLICISM, COMMUNISM AND DICTATORSHIP

C. J. Eustace

Benziger Brothers, New York, 1938, pp. 149, \$1.50

Mr. Eustace has not written an ambitious book in this study of the problems confronting religious-minded men under totalitarian forms of government. It is, rather, an elementary text introductory to the study of such problems. For that reason it is necessarily incomplete, does not include a section on the totalitarian state of Dictator Salazar, held up as a modern example of good government, nor does it pretend to give adequate solutions for the totalitarian problem.

What solutions are presented come under the four headings usually offered by the complete moralist: renewal of public and private life, disavowal of materialism, practice of charity and justice, the grace of God. As every true student of government knows, these four are as fundamental to statecraft as they are to woodcraft, as necessary for politicians as for carpenters. They must be applied to any and every form of activity. "The first thing to be done is for a Christian in name to become a Christian in life and in deed" (p. 22). That is all very true but the point is that it does not produce a statesman *qua* statesman, or a democrat *qua* democrat.

Thus a large portion of what might have been said by Mr. Eustace was left unsaid; and it should have been said, even at the expense of



omitting some of the religiosity. "The Totalitarianism of God," is a catchy title and it makes an interesting chapter, but the totalitarianism of God is a universal one while the state-problem for each of us is a national one. Really, the autocracy of God is taken for granted by every philosopher. What is of more immediate importance, at least at the present moment, is the contrast between governmental power and individual liberty on this material, human plane of living.

JOSEPH H. FICHTER.

### THE JESUIT CODE OF LIBERAL EDUCATION

Allan P. Farrell, S. J., Ph. D.

Bruce Publishing Company, Milwaukee, 1938, pp. xviii + 478, \$4.75

Father Farrell presents us with a volume that is outstanding in almost every respect. It will be welcomed by investigators in the history of education and of the Jesuit tradition as a monument of patient scholarship. The historian will find in it a model of objectivity and well-documented presentation of the fruits of research. Educational theorists will find a sound, thoughtful evaluation of theories and practices of the past, and a stimulating challenge for the improvement of the future.

The evident amount of labor and detail that entered into the publication of this volume entitle it to a place along side of the very documents of which it treats,—the various editions of the *Ratio* (1586, 1591, 1599), which were composed with an almost infinite amount of painstaking labor, and attention to detail.

Though it treats of the *Ratio Studiorum*, the author rightly entitles the book "The Jesuit Code of Liberal Education." He does not attempt the well nigh impossible task of an exhaustive study on the complete *Ratio*, but limits himself to the treatment of the humanistic curriculum. In treating this one phase, however, Father Farrell must give the complete story of how the framing of the entire *Ratio* was undertaken and carried out by many of the outstanding scholars of Europe in the last half of the sixteenth century. In these days of muddled thinking, or of incomplete ideas on things educational, the last chapter, dealing with "The *Ratio Studiorum* and Contemporary Education" deserves special consideration. Based as it is on an intimate knowledge of all the collated experience of centuries, it looks to the future and distinguishes between that which is lasting in education, and that which changes with the shifting trends.

In dealing with the practical difficulties of the drafting of the original *Ratio*, the author at times goes into detail that is of interest only to the specialist who would desire to spend an equal amount of time in research. Much of this information, however, serves the high purpose of clarifying many hitherto unsettled points about the early history of the educational efforts of the Jesuits. Especially noteworthy is the vindication of the large and important part that Ignatius played in the drafting of the Jesuit educational code.

A number of photostatic facsimiles of original manuscripts, together with appendices and an exhaustive bibliography are further evidence of the scholarly quality of the book.

E. J. FARREN.

### TOWARDS THE TWENTIETH CENTURY

H. V. Routh

The Macmillan Co., New York, 1938, pp. 392, \$3.50

This book is not a survey of the nineteenth century literature; it is rather an inquiry into the most vital thoughts of the great Victorians in their struggle to offer a solution to the important problems of life. Its aim is to trace the progress of culture through the nineteenth century, beginning with the transcendentalism of the Romantic, in the hope that a glance at the past may give us our bearings in the modern era of spiritual aimlessness and insecurity.

The problem that faced the Victorian thinker, according to Mr. Routh, was the reconciliation of culture and civilization. The complications of civilization tend to dissipate culture, the "individual's consciousness of his intimate self." Civilization unravels our personality into a hundred threads, culture reweaves them into a new and fairer pattern. It seemed, besides, that there was "in every individual something which cannot be adapted to corporate movements or material experience—some spiritual egocentricity which only thrives

on what it can imagine." The writer has hit upon the crux of the era, but his interpretation of it, as expressed in the preceding sentence, together with his whole concept of culture, is set forth in such nebulous language, that one is mystified as to what results the author hopes to accomplish. Although he has done a fine piece of work in following the course of nineteenth century thought, he fails in his objective: the enlightenment of the present. For this reason the book is unsatisfactory. It contains the vague spiritual gropings of a humanist, with a pronounced anti-supernatural bias, who is seeking for the significance of life in a scientific humanism that has rejected God. From such a viewpoint, the author, though familiar with the inner thoughts of the Victorians, is unable to make an enlightened estimate of their value or influence. He fails entirely, for instance, in his estimate of Newman's position and influence. To him, "Newmanism," which in essence contains the very solution that he is unconsciously seeking, is "a last gesture of the Middle Ages before relegation to museums. . ."

The book is excellent for tracing the turbulent stream of culture from the Romantic Movement on, for a study of the deep influence of Science on nineteenth century humanism, and as a handbook of the salient thought of the leading Victorians. But it offers little light or hope to the spiritual aspirations of the present generation.

BERNARD G. FAULSTICH.

### ALGAZEL'S METAPHYSICS

J. T. Muckle, C. S. B., (ed.)

Sheed and Ward, New York, pp. xix + 247, \$4.00

This edition of a thirteenth century Latin translation of Algazel's *Metaphysics* was first issued in 1933. It is, however, now offered for sale by the Institute of Medieval Studies in conjunction with Sheed and Ward.

Such a text will make a valuable addition to philosophical libraries. The *Metaphysics* of Algazel is in reality but a summary of the philosophical teachings of Avicenna. Hence, a knowledge can be gotten of the latter's thought from Father Muckle's edition. A synoptic table of contents and a complete list of variants make it useful and reliable.

It should be noted that additional help can be gotten in using this text by referring to the articles in the *Archives d'Histoire doctrinale et littéraire du moyen âge*, 10-11 (1935-1936) 103-127, by Father D. Salman, O. P. Certain criticisms are suggested that will be of interest to students of medieval philosophy.

THOMAS C. DONOHUE.

### GENERAL PSYCHOLOGY — FROM THE PERSONALISTIC STANDPOINT

William Stern

English translation by Howard Davis Spoerl

The Macmillan Co., New York, 1938, pp. xxii + 589, \$4.50

After the century-long era of the "schools" of modern psychology, there have arisen within the past decade or two, several attempts to found a "school to end all schools." As the phrase indicates, there is the conscious effort to correlate, in one comprehensive scheme, the most reliable positive data of the "schools" without commitment to their viewpoints or fundamental hypotheses.

These qualities are verified in William Stern's *General Psychology — From the Personalistic Standpoint*. The function of his book is ". . . to give a new foundation to the general psychology of the human individual." "It opposes one-sided treatments by doing justice to the varied methodological and theoretical approaches to psychological knowledge. . . ." "Psychology . . . is a growing collective enterprise giving scope to all who have any contribution to make." "In spite of this concern with the whole fabric of psychological specialties, our book will maintain a thoroughly distinctive and novel point of view diverging from that of traditional psychology. This is the personalistic point of view. . ."

The transition to the new theoretical principles required by personalistic psychology is rendered somewhat easier by the fact that the author's organization of his material does not impose demands



of an unfamiliar sort. However, the definitions of terms with which each section of the book is initiated are a disappointment to the careful reader. This may be the fault of the translator, but the fact remains that we are not furnished with clear-cut definitions of the concepts which are most fundamental and recur most frequently in the text.

This defect is most noticeable in the treatment of mind, or the substratum of mental data. It again confronts us in the discussion of thought and learning—animal and human. In his treatment of instinct the author makes a fine distinction between instinct and intelligence which could, and certainly should, have been made in his treatment of insight in animals, when on one page he speaks of animals as “thinking,” and on the next denies that they have “thoughts.” Again, when he speaks of the amount of substantiality which is to be attributed to the substratum of mental data, he is so non-committal as to be obscure. There, too, he makes the mistake of referring his readers to “the Aristotelian and Scholastic doctrine of the soul as an ‘actus purus.’”

THOMAS M. HARVEY.

## NATURALISM IN AMERICAN EDUCATION

Geoffrey O'Connell

*Benziger Brothers, New York, 1938, pp. 259, \$2.75*

As Dr. O'Connell significantly remarks, “When the results produced by an educational system are not satisfactory, we are justified in questioning the philosophy behind it.” But what principle is at the bottom of our education? The author's answer after a very capable and painstaking analysis of both past philosophy and that of the most prominent contemporary educators, is “Naturalism . . . that attitude of mind which makes man continuous with nature by confining his destiny to earth and eliminating the supernatural.”

Tracing the beginnings of this concept in Francis Bacon on through Descartes and Locke, Hume and Kant, through the Encyclopedists, Rousseau, Darwin and Spencer, Dr. O'Connell reveals how the stream of Naturalism was formed out of materialism, positivism, and evolutionism, how it broadened and flowed more swiftly as time went on, and how it was applied to education. At the beginning of the present century the movement, though constantly attacked by Babbitt, More and Foerster, was taken up and advanced by the Columbia group under Dewey.

What with educators writing that “human affairs, associative and personal, are projections, continuations, complications, of the nature which exists in the physical and prehuman world”; and Kilpatrick, “Experience is the beginning and end of all things”; and Rugg, “Our dichotomy consists of the pragmatic-social attitude and the attitude of self-cultivation, the heart of the new individualism”; and Thorndike, “Nowhere more truly than in his mental capacities is man a part of nature,” it was fearfully clear that the most influential among American educators were injecting into the country's schools such doctrines as must ultimately undermine not only all faith and morality but the very institution of government itself.

F. Fox.

## REALITY AND VALUE

A. Campbell Garnett

*Yale Univ. Press, New Haven, 1937, pp. 320, \$3.00*

It is something of a pleasure to pick up Dr. Garnett's book after laboring through some of the heavy writing of our “profound” thinkers. Clarity and easy reading are no detriment to good metaphysics. There is some good metaphysics in Dr. Garnett's essay, though we would judge it incomplete. Like Bergson in his *Two Moralities*, the author stresses the moral values that are immanent in human activity, that arise spontaneously out of will-situations. “It is important,” he writes (p. 311 n.), “to remember that the value qualities thus discovered through this complex interaction of will are not produced by it. They are objective features of reality . . .”

He also recognizes a thing many value-philosophers neglect. These will-values must be reduced to an ontological principle. Quoting Pringle Pattison, “the modern tendency,” he says, “to divorce ethics

and religion is one fraught with social danger as well as *metaphysically unsound*” (p. 313; italics added).

But Dr. Garnett is less successful in his elaboration of the concept of God and of religion. In attempting to “rationalize” the ultimate principle of all Being, the utmost care must be taken lest we rationalize it to the limited pattern of our own minds, unconsciously making an absolute intellect out of the human reason. As for religion, if it has the almost necessary relation to ethics Dr. Garnett seems to find in it, it cannot be based on something accidental or out of focus with the rest of value experience. In religion, the Creed must have the same relation to its morality as metaphysics to pure ethics. Dr. Garnett cannot logically make so light of creeds.

The system then is not quite satisfactory, partly no doubt because of an inadequate metaphysical basis. It may also be, however, that all natural ethical systems are foredoomed to failure. A complete pattern of epistemology or cosmology or psychology may be discoverable by reason alone, but ethics, in concrete reality is left “open” to a higher morality and can only be articulated in a supernatural order.

R. J. HENLE.

## THE SUBSTANCE THEORY OF MIND AND CONTEMPORARY FUNCTIONALISM

Thomas J. Ragusa

*Catholic University Press, Washington, 1938, pp. viii + 101*

The title of this dissertation is rather misleading; more to the point is the sub-title: “A critical estimate of the theory of mind in the philosophy of Thomas Aquinas in its relation to the theories of mind in Aristotle and in the functionalism of John Dewey.” Specifically, the point the author wishes to make is that the philosophy of Thomas Aquinas on the one hand and contemporary functionalism as exemplified in the pragmatic empiricism of John Dewey on the other, each regard Aristotle as the common source of their radically opposed theories of the nature of mind.

Aristotle is shown to have furnished in his theory of mind the germs of both substantial and functional theories of mind. Aquinas, by applying the doctrine of potency and act to the doctrine of matter and form, accounts for the substantiality of mind, while allowing for and, in fact, clarifying the notion of its functionality. He clarifies the issue by distinguishing sharply between existential separation and mere real distinction in function. Hence, with regard to the active intellect, there is no existential separation, but only a separation in function. This basically differs from the position of Aristotle, who stated explicitly that the active intellect is a different kind of existential being because of its peculiar function in intellection.

In the theory of mind elaborated in the writings of John Dewey, the necessary substantial element in Aquinas' theory is denied and the concept of function alone made to explain mentality. Just how Dewey may be said to have arrived at this position is a rather long story and the author, we thought, leaves many lacunae in tracing this development. However, he quotes copiously from Dewey's works to show how completely he omits reference to an active agent in his presentation of mind as a series of “thats” immediately present—and no more. Some of the more fundamental contradictions and dilemmas revealed in Dewey's philosophical pontifications are convincingly set forth.

The first section of the work, that on Aristotle, we found to be rather over-weighted with technical terminology; the second, on Aquinas, remarkably lucid (perhaps it was because Aquinas is allowed to speak for himself?); and the third part, on Dewey, rather convincingly and yet, withal, an image of the indefiniteness of Dewey's own thought. Throughout, the author keeps his problem in mind and, save for one rather extensive formulation of the metaphysical background for Dewey's pragmatic empiricism, avoids wanderings into other fields. However, omitting the fact of confrontation with an identical problem, there is no actual link revealed between Dewey and his two predecessors, such as we were led to expect from the author's statement of his problem.

THOMAS M. HARVEY.